

# PULP & PAPER

AUGUST 1955

Is C&W Good or Bad? Superintendents Hear About It

see page 43

Where Is Coating Going?

see page 48

What Will Olin-Mathieson Do?

see page 52



...consider

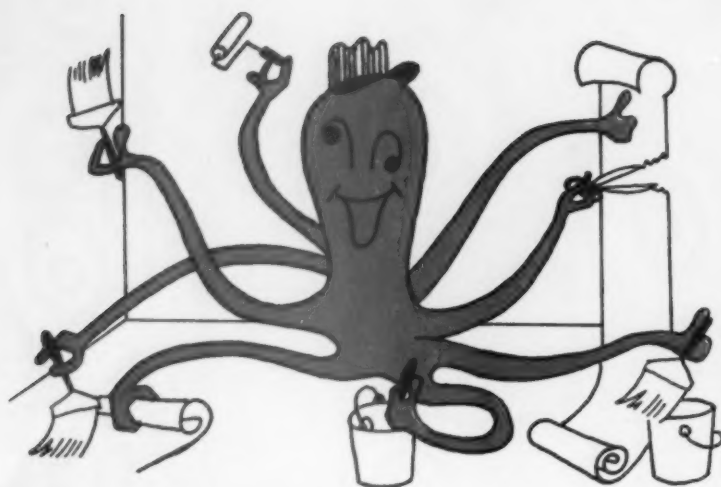
How KVP dis

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page 58





The difference is—

## **PAREZ® Resin 607** is as efficient as an **8-armed paperhanger**

Once in your paper mill, PAREZ 607 goes to work like a one-man gang. Here are the 8 big jobs it does—the 8 big reasons why PAREZ 607 is preferred by so many mills:

1. **PAREZ 607** delivers wet strength *at the reel*.
2. **PAREZ 607** gives consistent results from grade to grade in all commonly used pulps.
3. **PAREZ 607** is efficient in low, high and neutral pH's, and at lower drier temperatures, too.
4. **PAREZ 607** needs no alum or catalysts . . . reduces wet press sticking.
5. **PAREZ 607** cuts beater time and power costs . . . gives better drainage, faster drying, higher dimensional stability and lower tendency to curl.
6. **PAREZ 607** improves wax and rosin size efficiency . . . gives less foam trouble on machines, less "pitch" in systems.
7. **PAREZ 607** dry powder in bags means lower shipping costs, easier handling, less storage space . . . and, it has a shelf life well over a year.
8. **PAREZ 607** is a MELOSTRENGTH® resin, the fastest mover in the paper market . . . backed by the national MELOSTRENGTH Promotion Program.

Every one of these reasons spells profit. So ask your Cyanamid representative for full details on how to get and how to use PAREZ 607.

THE LARGEST VARIETY OF PAPER CHEMICALS, to serve every industry need, is offered by Cyanamid, and is backed by the services of technical experts with years of practical mill experience.

### **Recent Mill Developments With Cyanamid's Paper Chemicals . . .**

**Don't judge** the effect of size color on paper brightness until you try it. Recent tests of a number of sizes in bleached sulphite pulp showed that color of size is not wholly related to brightness of sized paper. Your Cyanamid representative can give you the details.

. . . .

**Highest pick test** a western mill has ever had on starch coated off-set sheet was secured by addition of PAREZ 620 Resin at rate of 20% on starch weight. Dennison Pick went from 11 to 20 on felt side, and 14 to 20 on wire side.

. . . .

**Pigment usage is halved** in super white coated board by an eastern mill through addition of 1% sodium phospho aluminate as aid in filler and fiber retention. The saving in titanium dioxide pigment is \$4.50 per ton of board over and above cost of added S. P. A.

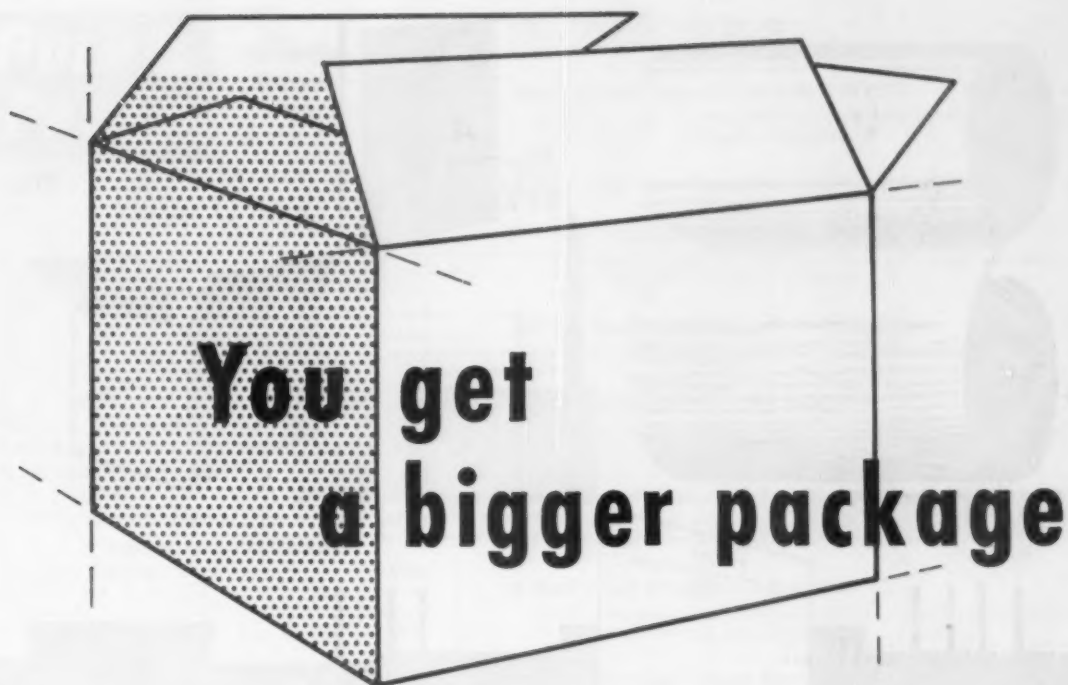


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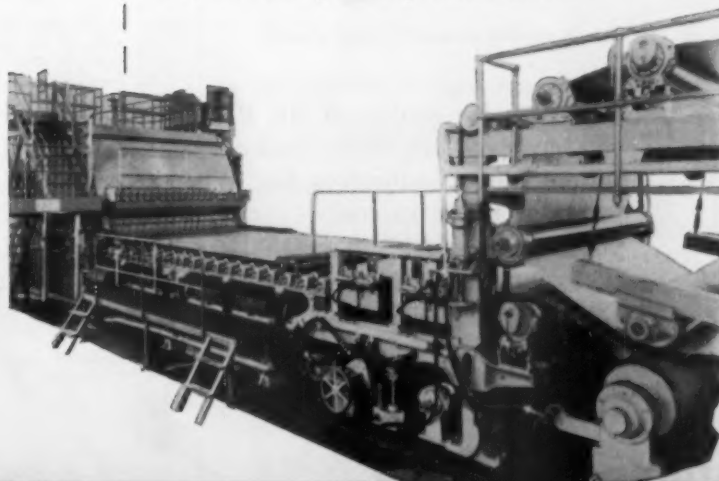
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- OK BRAND Pearl
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- OK BRAND Oxidized Starches



# PULP & PAPER

Production and  
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of the Industry

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MILLER FREEMAN PUBLICATIONS

PULP & PAPER — August 1955

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### STRICTLY PERSONAL

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**Editorial Without Words**

Here's an editorial in a picture. Need we say more?

Tom Rider and his lieutenants in a certain well known papermakers' felt manufacturing enterprise in the little town of Oriskany, along the Empire State's historic barge canal going west from Utica, came up with this one.

This bewildered individual's picture appears on a little notepad which one of Tom's men handed us.

We all know that conventions are one of the major occupational hazards of modern business.



*"What a convention! I don't remember a thing!"*

**How's That Again? Newsprint Without Pulp?**

Here's a new and rather startling idea, hatched by a newspaper executive, to solve the problem of newsprint cost: Go find a substitute for pulp!

Harry Eybers, production manager of the Washington Post and Times-Herald, addressing a Sioux City conference recently, remarked on the apparent failure of the newspaper business to emerge from the horse-and-buggy era in its methods of operation.

Newspapers, said Mr. Eybers, were full of suggestions for bettering the world, but they notoriously did very little to get themselves out of a rut. They used the same old machines, the same processes, even the same paper. And they paid a lot more for that paper since the days when he was a boy.

Like a lot of other people in the newspaper business, Mr. Eybers has difficulty reconciling rising costs of newsprint with rising costs of just about everything else. What he can't get out of his head is the fact that newsprint that cost about \$30 a ton 30 years ago sells today for \$126.



Sure, he admits that in all those years the quality of newsprint has improved, but gosh, the price is too high and, according to Mr. Eybers, only the newsprint people (who conceivably are closer to the facts than anyone else) can justify it.

All this causes Mr. Eybers to speculate on the possibility of finding some other cheaper raw material for newsprint.

"Why is newsprint still made the same way?" he asks. "Why have we not found a substitute for pulp? Maybe if a substitute for pulp was found we could make more newsprint in this country instead of being forced to import so much of it."

Mr. Eybers isn't explicit as to what he means by pulp. If he means woodpulp, and believes that the newsprint industry can get along without it, he's really getting into the realm of fantasy. It's hard to conceive of paper being manufactured without fibrous material, and it's an established fact that by far the greatest source of fiber on this continent, and the cheapest, is the forest. Anyone with doubts as to the continuing essential role of woodpulp in the world's economy should study the findings of the Stanford Research Institute (PULP & PAPER, July 1955).

When Mr. Eybers or anyone else suggests a substitute for woodpulp in the manufacture of newsprint he is putting himself in the same category as the theorist who imagines a satisfactory bread without wheat, a car without gas and a skyscraper without steel.

**The Editor**  
**PULP & PAPER**  
 1791 Howard Street  
 Chicago 26, Illinois

**READERS CORNER**

No anonymous letters will be considered but names may be withheld if desired.

**"Fine Review of Forest Practices"**

We were interested to see that you used a picture of our Texas timberlands on the cover of the July issue of PULP & PAPER.

You appear to have done a fine job in your review of forestry practices, pulpwood production and other phases of woods operations.

RUEBEN B. ROBERTSON JR., President, Champion Paper & Fibre Co.

**Wants Tax Information**

On the editorial page of your June issue you carry an editorial on a taxation study made by one Chapter of the Society of American Foresters. We have been making studies along this line in Mississippi and we are wondering if any other Chapters have been making similar studies. If so, we would like to have the name and address of the person to contact. We feel that this subject is of the utmost importance and we would like to secure all of the information possible concerning it.

A. W. NELSON, JR., Chief Forester, The Flintkote Co., Meridian, Miss.

**"A Very Nice Job"**

I think Maurie Castagne did a very nice job on the Coating Conference, both in regard to pictures and the writeup. I think you are doing a very nice job with your publication.

J. D. DAVIS, Asst. to Vice Pres. in charge of White Paper Mills, The Mead Corp., Chillicothe, O.

**Praise for Pulpwood Issue**

Your issue of July (Pulpwood Annual) is a very fine one.

L. J. FREEDMAN, Vice Pres. Penobscot Development Co., (subsidiary of Penobscot Chemical Fibre Co.) and President, American Pulpwood Assn.

**Forest Genetics "Coming Into Own"**

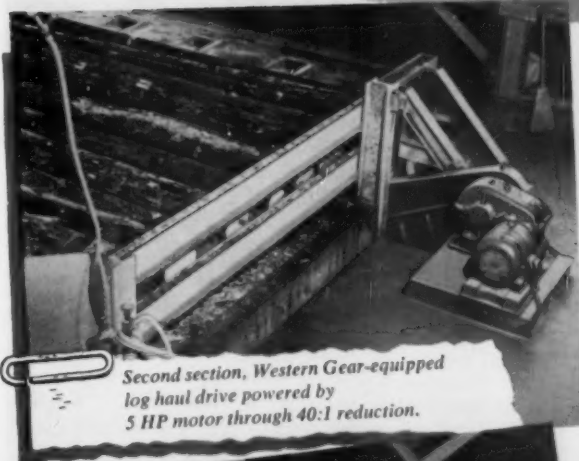
We are interested in the story "Florida Will Grow Superior Trees" in your June issue. We are doing similar work in Minnesota. Forest genetics and tree improvement, through research and selection, are just coming into their own on a nationwide basis.

C. H. SCHACKER, Secretary, Blandin Paper Co., Grand Rapids, Minn.

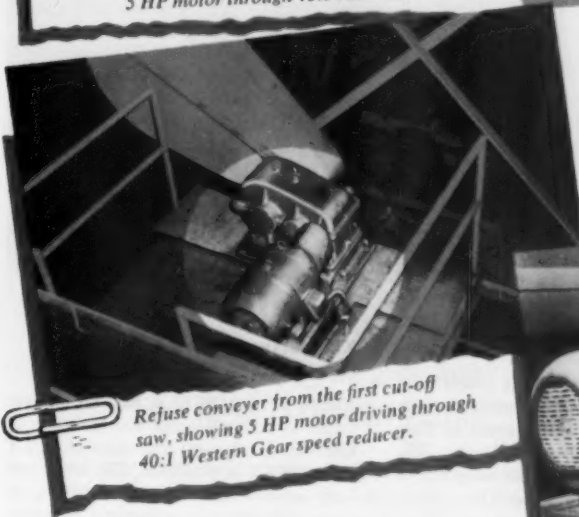


# WESTERN GEAR

## modernization pays off for Inland-Empire!



Second section, Western Gear-equipped log haul drive powered by 5 HP motor through 40:1 reduction.



Refuse conveyor from the first cut-off saw, showing 5 HP motor driving through 40:1 Western Gear speed reducer.

Western Gear engineers, backed by 67 years of experience in designing and manufacturing speed reducers, gear drives and other equipment especially adapted to pulp and paper mill installations, can show you how you can reduce operating costs and increase profits. Call on them for recommendations on modernizing or installing new equipment. They'll be glad to help, no obligation. Write General Offices, Western Gear, P.O. Box 182, Lynwood, Calif.

Increased production with lower costs pays off for you in added profits when you modernize with Western Gear equipment. Inland-Empire Paper Company proved it when it called in Western Gear engineers to modernize its wood room. W. H. Rambo, well-known consulting engineer of Portland, Ore., designed the layout for the Inland-Empire mill and in collaboration with the mill staff selected Western Gear reducers for this important installation. Twenty-two Western Gear speed reducers and gear drives were installed. The immediate result was smoother operation and increased production. Down time now is virtually nil and maintenance has been reduced to a minimum.



Log transfer to barker showing Western Gear 60:1 speed reducer driven by 15 HP motor.

"The difference is reliability" • Since 1888

# WESTERN GEAR

ENGINEERS AND MANUFACTURERS

PLANTS AT LYNWOOD, PASADENA, BELMONT, SAN FRANCISCO (CALIF.), SEATTLE AND HOUSTON — REPRESENTATIVES IN PRINCIPAL CITIES

PULP & PAPER — August 1955



## NORTHEAST NEWS

### Changes in St. Regis Mills; Rayonier Adds Engineers

**FRANK GONDEK** has been promoted from night foreman to plant supt., Herings, N.Y., mill of St. Regis Paper Co. **ROSS FALLON**, has been named asst. general supt., St. Regis Deferiet, N.Y., mill. **C. WELLS CLARK**, former coating supt., succeeds Mr. Fallon as chief chemist. **LAWRENCE LYMAN** has been advanced from assistant to coating supt. and **G. BYRON STEENBURGH, JR.**, goes to new post of special assistant to general supt., **LESTER J. SMITH**. **FRANK MITERKO** has been promoted to supt. of Deferiet pilot plant operations. **GUNNAR T. HANSSON**, chairman of the board of directors of Elof Hansson, Inc., announces promotion of **BENGT E. AKERBLUM** as vice president and **JOSEPH J. SANTRY** as secretary. Mr. Akerblom joined Hansson in Gothenburg in 1945 and has represented them in Cuba.

**WILLIAM A. CAWLEY, THOMAS A. MOSTYN** and **STIG G. PALMGREN** have joined Rayonier Inc.'s engineering dept., according to **RUSSELL F. ERICKSON**, vice president in charge of engineering. Mr. Palmgren will be an assistant to Mr. Erickson in N.Y. handling special expansion and construction assignments. Mr. Mostyn will serve in staff capacity to assist plant engineers in coordinating programs. Mr. Cawley is a specialist in sanitary engineering and effluent disposal and treatment.

**ERIC A. SCHLAGINHAUFEN**, Geigy Dyestuffs, will cover paper mills in New England following the resignation of **ROBERT R. BARRINGTON**. Mr. Schlaginhaufen previously was assigned to metropolitan N. Y.

**DR. WARREN STUBBLEBINE** has been named director of research and development. Stowe-Woodward, Inc. He is a c.e. graduate of Penn. State U. where he also received his doctorate and was formerly with Connecticut Hard Rubber Co. as director of development and Armstrong Cork Co., as head of research section.

**RALPH M. LEIGHTON**, formerly chief chemist, has been appointed technical service manager. He has been with S-W 24 years and will now spend considerable time in the field consulting with users of rubber covered rolls, functioning between manufacturing, sales, research and development. He is a graduate of the U. of

Maine. **DR. R. C. CONN** and **DR. W. P. MUNRO** have been appointed development managers for the technical dept., Organic Chemicals Div., American Cyanamid Co.

**HERBERT J. REID** has been named an assistant general manager of the mechanical goods div., U.S. Rubber Co.

**GEORGE C. BORDEN, JR.**, technical director of Riegel Paper Corp., died of a heart attack. He headed their research and development program.

**C. V. GREGORY**, manager of district sales, Reliance Electric & Engineering Co., announces that **PETERSON NESBIT** has been transferred to Boston as sales engineer for New England, and **CHARLES ROBERT SARCEANT** is sales engineer in the N.Y. office.

**DONALD M. ROCHESTER**, secretary of the Community Relations Committee of the American Paper & Pulp Assn., died recently of a heart attack, at his family home in Boyne City, Michigan, July 3.

**DR. JOHN M. CLEGG** and **DR. ARTHUR KATCHMAN** have joined the technical staff of the research and development dept., Hooker Electrochemical Co., Niagara Falls, N.Y. **THOMAS H. TRIMBLE** has been named manager of public relations for Hooker, according to **R. WOLCOTT HOOKER**, vice president.

**PIERCE MANLEY** is new No. 1 plant engineer at Kimberly-Clark's Niagara Falls, N.Y., mill, coming from their Neenah, Wis., mill.

**JAMES W. KEMMLER** has joined Bird & Son, Inc., as chief chemist of their research div., with headquarters at East Walpole, Mass. He replaces **DR. DANIEL O. ADAMS**, who resigned to join West Va. Pulp & Paper Co.

**CARLTON F. DISKIN** has been elected a vice president of Gottesman & Co., Inc., according to **D. SAMUEL GOTTESMAN**, president of Gottesman and of Central National Corp. Expanding operations required an enlarged executive staff. Mr. Diskin has been in the industry 15 years and recently was vice president in charge of sales of a large integrated pulp-board-container company.

New officers for New England section of TAPPI are **GORDON L. BENSON**, chairman, St. Regis, East Pepperell, Mass., **C. L. REECE**, vice chairman, Westfield River Paper, Russell, Mass.,



## Head Oxford Operations

**H. PAUL PETZOLD** (left), is new Manager at Oxford Paper Co.'s Rumford, Me., mill. **CHARLES L. FERGUSON** (right), is new Asst. Mill Mgr. at Rumford. Mr. Petzold started with Oxford in Ohio in 1937 after being with I.P. in Berlin, N.H., Palmer and Niagara Falls, N.Y. He has now succeeded Walter Holland, who returned to his native Canada to be Vice Pres. of the new pulp company, B.C. Forest Products Ltd. Harry Conner is new Gen. Supt. at Rumford.

**ROBERT W. RAMSDELL**, secretary-treasurer, Hercules Powder, Holyoke.

**CHARLES W. HOWARTH**, president, Columbia Box Board Mills, Inc., announces the promotion of **ROBERT R. HOWARTH** to executive vice president. **WILLIAM KRAPF**, general manager, Bulkley, Dunton Processes, Inc., announces the appointment of **ALFRED W. SUBERT** as eastern district sales manager. He will headquarter at 295 Madison Ave., N.Y.C.

## MIDWEST NEWS

### Kimberlys on Sad Journey; New Oxford Miami Mgr.

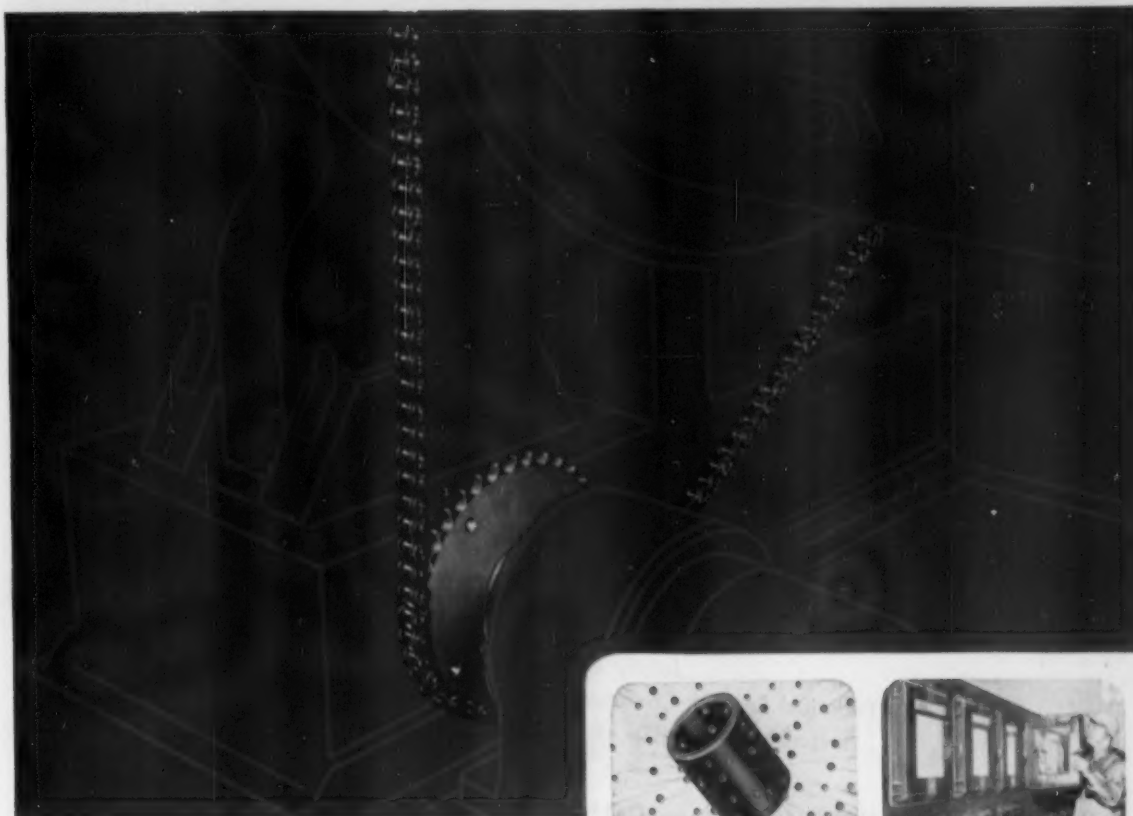
**JOHN R. KIMBERLY** has taken over duties as both president and chairman of Kimberly-Clark, with retirement of **COLA G. PARKER** as chairman. The latter will keep an office in K-C main offices, to prepare for his year as national president of NAM, and other activities. Only a few days after this change, Mr. and Mrs. **KIMBERLY** left on a sad air journey to Tokyo to join their daughter, Mrs. **JOSEPHINE KIMBERLY BELL**, whose husband, 2nd Lieut. **DAVID WINTON BELL**, son of the president of General Mills, was lost at sea near Tokyo when his Sky Knight jet ran out of gas.

**CHARLES CLAYPOOL** has been appointed new mgr. of Oxford Miami Paper Co., West Carrollton, O. **JOHN L. CLOUSE** was promoted to tech asst. to the mgr.

Continued on page 10



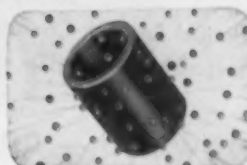
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## \*And you pay no premium for these LINK-BELT extras

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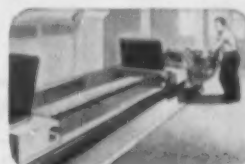
**SHOT-PEENED ROLLERS** have greater fatigue life, added ability to withstand impact.



**CLOSER HEAT-TREAT CONTROL**—coupled with rigid testing insures uniformity.



**LOCK-TYPE BUSHINGS** (applied on a range of sizes) end a cause of stiff chain.



**PRE-STRESSING** of multiple width chain provides uniform load distribution.

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ROLLER CHAIN & SPROCKETS

LINK-BELT COMPANY: Executive Offices, 307 N. Michigan Ave., Chicago 1. To Serve Industry There Are Link-Belt Plants, Sales Offices, Stock Carrying Factory Branch Stores and Distributors in All Principal Cities. Export Office: New York 7; Canada, Scarborough (Toronto 13); Australia, Marrickville, N.S.W.; South Africa, Springs. Representatives Throughout the World.



## GROUNDWOOD MEN:

*Bring along the boss!*

Mutual problems of administration and technical phases  
of operation will be covered at the



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## **MECHANICAL PULPING CONFERENCE**

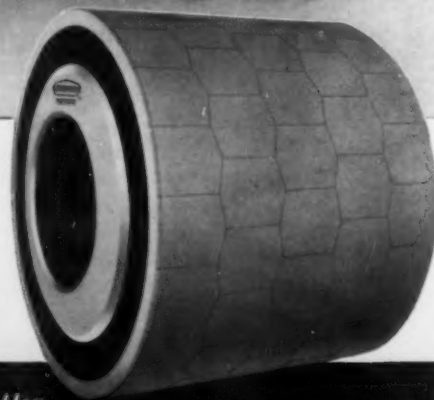
POLAND SPRING HOUSE  
Poland Spring, Maine  
SEPTEMBER 19, 20, 21, 1955

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**NORTON**  
PULPSTONES

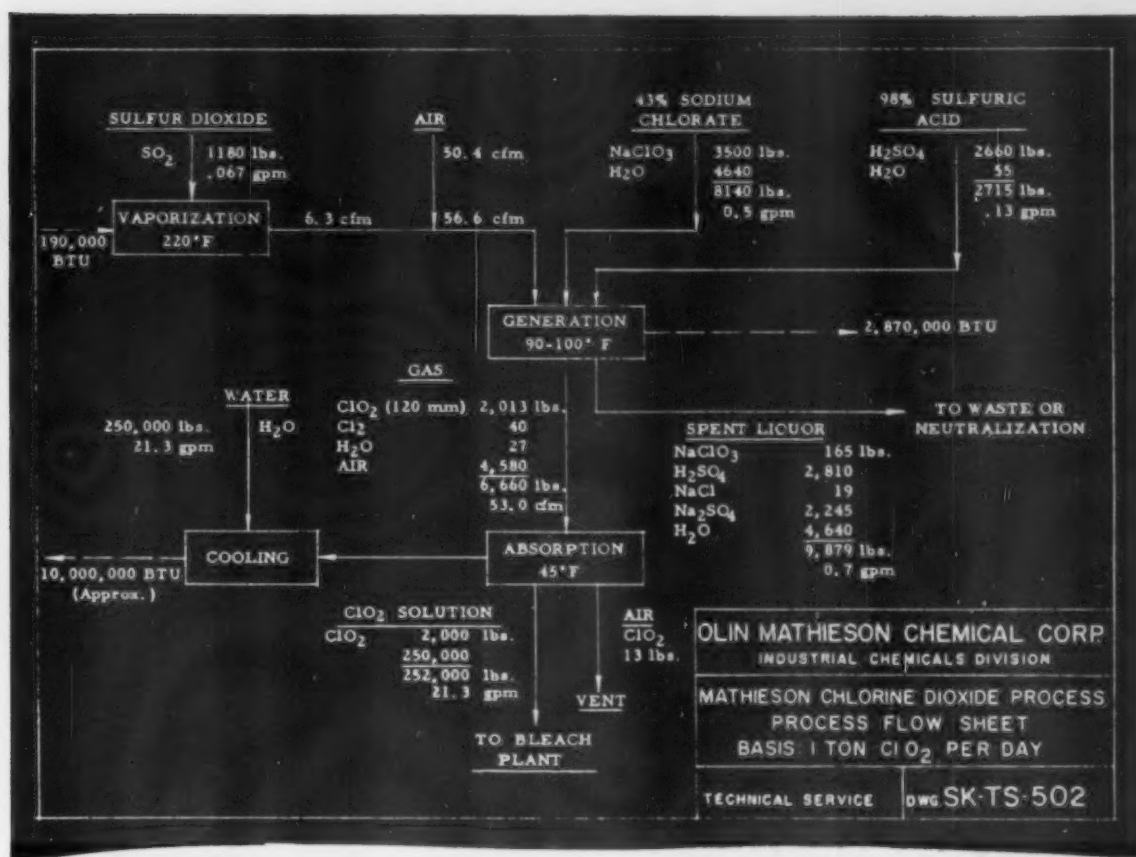
**NORTON COMPANY, WORCESTER 6, MASS.**  
Norton Company of Canada, Ltd. Hamilton, Ontario



*Making better products... to make your products better*

Abrasives - Grinding Wheels - Grinding and Lapping Machines - Refractories - Porous Mediums - Non-slip Floors - Norbide Products





## MATHIESON CHLORINE DIOXIDE PROCESS

# LEADS THE WAY IN SUPERBLEACHING

Chlorine dioxide in any amount, at lowest cost . . . that's what this Mathieson process yields for superbleaching of paper pulp. Developed by Mathieson and made available without charge to users, this process is just one of the many contributions made by Mathieson to the advancement of the pulp and paper industry.

Twenty-one years ago Mathieson pioneered in the use of chlorine dioxide for the superbleaching of paper pulp. Today,

Mathieson chlorine dioxide producing units in pulp mills, projected and in operation, outnumber all other units two to one.

Through long association, Mathieson has gained unmatched experience in chlorine dioxide for superbleaching of pulp and paper. Our technical service staff will be glad to discuss its application in your particular operation. Call your local representative or write today.



**MATHIESON CHEMICALS**  
 OLIN MATHIESON CHEMICAL CORPORATION  
 INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.



### MIDWEST NOTES

**JOHN W. FITZPATRICK** was picked by Marathon to manage its new Neenah, Wis., label and specialty plant, and he is succeeded as manager of the Menasha waxed paper plant by **LESTER H. SEBORA**. Mr. Fitzpatrick, Wisconsin U. '39, formerly managed the Menominee, Mich., mill. Mr. Sebora, Ripon College '34, was Menasha carton plant supt.

**ARNOLD PLIER**, president of D. J. Murray Mfg. Co., Wausau, Wis., has 24 maple trees around his woodsy home outside Wausau, with a hoot owl in every one of them.

His next door neighbor, **ROY H. KELLY**, retired Marathon mill manager and supt., who never was seen in paper-making days without a starched clean shirt, admits he is getting to be a grubby gardener, and liking it.



### Schulenburg Heads Group; Barrett Talks at NPA

**M. J. (JOE) SCHULENBURG** (left), Manager of Public Relations, Kimberly-Clark Corp., has been elected General Chairman of Information Service, Wisconsin Paper Industry, the unique group which pioneered many new community relations policies for this industry and which he helped to organize 5 years ago. The APPA community relations for co-operative regional activities of mills was patterned after IS, WPI, an association of 19 Wisconsin paper companies. **IRA BOYCE**, Asst. to Pres., Consolidated Water Power & Paper, and **H. R. MOORE**, Secy., Bergstrom Paper, were elected Vice Chairmen, **A. C. HASELOW**, Gilbert Paper, Treas., and **JOHN McCUNE**, Coordinator-Secy.

**WILLIAM M. BARRETT** (right), Vice Pres., Mead Pulp Sales, Inc., was spokesman for the North American pulp industry recently before the National Paperboard Assn., and told them 1955 will be a banner woodpulp year, that record sales are continuing, but pulp is being consumed, and not going into inventories. He predicted England would lead a big expansion abroad, demanding more American pulp.

**GEORGE ROYAN** is newly appointed plant engineer of the Appleton, Wis., division of Consolidated Water Power & Paper Co., according to **LEONARD SMITH**, manager at Appleton. Mr. Royan was with Consolidated central engineering since 1946.

We regret an error in our Midwest notes last month which reported **ROBERT R. BUSS**, Hercules Powder Co. veteran moving from Wilmington, Del., to Kalamazoo—especially because we carried the correct news in an earlier issue—he moved from Kalamazoo to Wilmington, where he is now acting manager of the branch sales office.

**WILLIAM MACKLEM SR.**, retired sales engineer of Black-Clawson and one of the most widely known machinery salesmen in the industry, died during the night of June 13, at the age of 64, at his Hamilton, O. home. This was during the Cincinnati Supts. convention, only 25 miles away, and the news was saddening to many friends there.

**JOHN O'SELL** is new assistant chief steam engineer for M & O, International Falls, Minn.

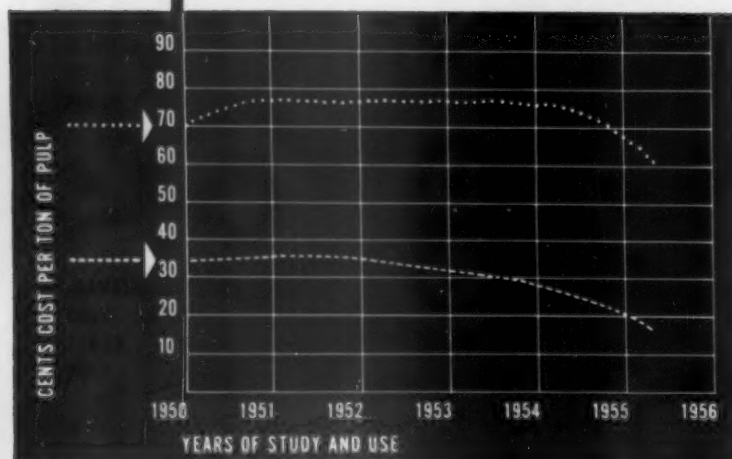
Continued on page 14

# Rhodia

## announces

a sharp price reduction in **ALAMASK**, with improved odor abatement for all operations of alkaline pulping, at new low costs per ton of pulp.

This means lower prices for the new **ALAMASK P6D** ... lower cost per ton of pulp for control of malodors, whether you treat gases from digester operations, recovery, or condensers. Let the chart tell the story —



**ALAMASK** will do the job cheaper with better than average odor control. May our trained engineers help you with your malodor problems?

# Rhodia

INC.

230 Park Avenue, New York 17, N. Y.  
PLANT: PATERSON, N. J.



*A message to PULP AND PAPER MILL MANAGEMENT*

Here's how you can use

## STRATEGIC PURCHASING

*to help your company maintain  
a sound competitive position*

As profit margins tighten, your purchasing strategy becomes a vital force for success.

The way you purchase heavy chemicals, for instance, can influence your company's profits in the years ahead.

So it becomes increasingly important for you to seek every possible economic advantage when you select a chemical supplier.

Here, for example, are a few things to look for, when deciding on a source for caustic soda, chlorine, and other chemicals:

**1. Supply security.** How flexible are your supply lines? For instance, a supplier with plants located on deep water may be able to offer you a choice of rail or water delivery. This can insure you steady supply, in case of rail service interruption.

**2. Engineering help.** A supplier's

engineering staff can often be valuable to you when you are setting up a new bleaching process or caustic and chlorine handling systems—not only with advice, but with actual design assistance.

**3. Smooth processing.** You'll find it helpful to work with the supplier's technical service men who visit you periodically. Often these men can spot potential problems and ward them off before they cause you trouble.

**4. Safety programs.** Your men can benefit from safety suggestions offered by your supplier. You should have on tap the latest in safety equipment, plus up-to-date information on safe handling of chemicals.

**5. Economy.** Choose a supplier who wants to help you cut your operating costs; who will go all the

way with you in arriving at the best, most advantageous method of shipping and handling for your conditions.

**6. Experience.** Above all, choose a supplier who is familiar with your industry. It takes years of experience to acquire an understanding of the problems you face, and the know-how to help you solve them quickly and economically.

Are you getting your fair share of these strategic purchasing advantages?

Many of our friends in the pulp and paper industry feel that they get these advantages in buying from Hooker, closely associated with the pulp and paper industry for 50 years.

In the light of the growing importance of these factors, isn't this a good time to review your policies on sources of chemical supply?



—1905—Half a Century of Chemicals from the Salt of the Earth—1955—

**HOOKER ELECTROCHEMICAL COMPANY**

2 Union St., Niagara Falls, N. Y.

NIAGARA FALLS • TACOMA • MONTAGUE, MICH. • NEW YORK • CHICAGO • LOS ANGELES



## **Practical service training at Honeywell's school . . .**

***makes your instrument  
men more valuable***

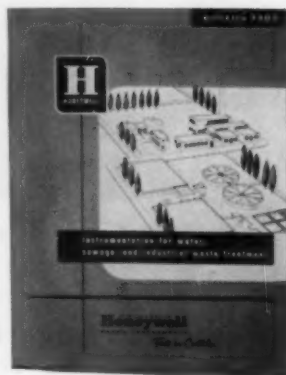
Your instrument maintenance men can get a real education in the most up-to-date methods for servicing instruments, at Honeywell's Training School. Any organization which uses Honeywell instruments can send maintenance personnel to this school. Tuition costs you nothing, for this school is maintained as a "plus-value" service to Honeywell customers.

Thousands of technicians have either started or augmented their instrument knowledge here. A variety of courses is available, to fit men for the particular kind of maintenance problems they may encounter in their specific jobs. The comprehensive course . . . one of the most complete and intensive offered anywhere . . . covers about thirteen weeks. Other courses cover five weeks and less, to offer condensed instruction of either a basic or "refresher" nature to men who can't be spared for extended periods.

There's nothing academic about this school. The emphasis is placed on practical knowledge. Theory through lectures and textbook study is liberally supplemented by laboratory sessions and actual bench work on all types of instruments and related equipment.

One caution: classes have to be limited to assure thorough attention to all students, so make reservations in advance. Your local Honeywell office will be glad to make arrangements. Call today . . . it's as near as your phone.

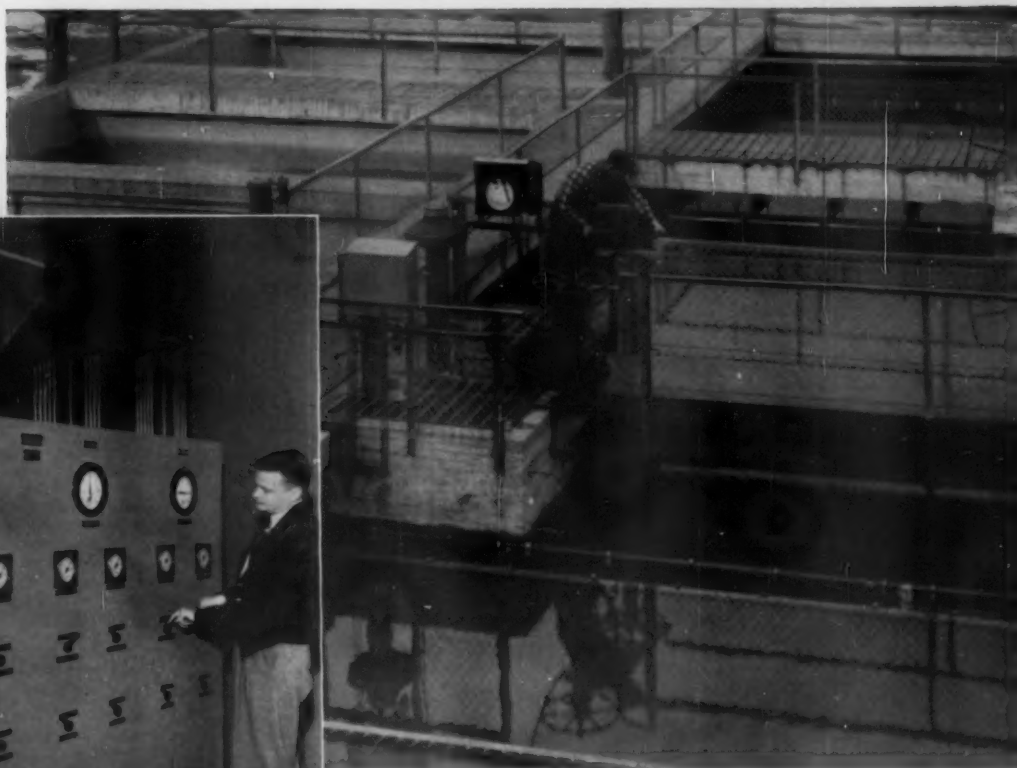
## **One man per shift *plus* Honeywell instrumentation**



● **REFERENCE DATA:**

Send for Bulletin 7302, "Instrumentation for Water, Sewage, and Industrial Waste Treatment." 24 well-illustrated pages of various applications and instrumentation.





*At Publishers Paper Co., Oregon City, Ore., water-treatment plant is run from this one compact Honeywell panelboard. Space-saving Tel-O-Set instruments record all flows. Operator can reverse filter beds for reverse flushing simply by throwing air switch on panel.*

## assures clean water, year 'round

WITH the aid of Honeywell instrumentation, one man per shift is able to keep a steady supply of clean, clear process water flowing at Publishers Paper Co., Oregon City, Oregon. The plant operates right around the clock.

Flow and liquid level control on the holding tanks are so integrated, that this phase of the water-treating operation virtually runs itself. There are three Honeywell Flow Controllers to each Liquid Level Controller. Levels in the clearwells are indicated and controlled, the Liquid Level Controllers adjusting the set points on the influent Flow Controllers accordingly. Total flows—both influent and effluent—are recorded.

Miniature Tel-O-Set instruments show operation of

the entire water-treatment plant on one small, compact panelboard. Assembly and installation of all equipment—instruments, panel, piping—were done by Honeywell field personnel. And Honeywell engineering experience helped reduce over-all cost of the installation substantially.

Whether field-assembled or package units, Honeywell can supply you with a complete installation. Your nearby Honeywell sales engineer will be glad to discuss water-treatment applications in your own plant. Give him a call . . . he's as near as your phone.

MINNEAPOLIS-HONEYWELL REGULATOR CO., Industrial Division, Wayne and Windrim Avenues, Philadelphia 44, Pa.—in Canada, Toronto 17, Ontario.



MINNEAPOLIS  
**Honeywell**  
BROWN INSTRUMENTS

*First in Controls*



## PULP & PAPER

## STRICTLY PERSONAL

### MIDWEST NOTES

GEORGE HRUBECKY, the late manager of central plant engineering, Marathon Corp., and E. A. PAGE, late staff supervisor of safety, Kimberly-Clark, who died in recent months, leaders in Fox River Valley Boy Scout council work, were honored when a Geo. Hrubecky Campsite, with 9 tent sites, and an E. A. Page Rifle Range were dedicated to them.

ARDREL S. PETERSON is new process control engineer, Detroit mill of Scott Paper Co. He was with Scott at So. Glens Falls, N.Y.

FREEMAN PERRY, brother of HENRY PERRY, head of sales, Lockport Felt, is acting manager of Ward Paper Co., Merrill, Wis. Born in Cambridge, Mass., Freeman Perry graduated from McGill U., was formerly with Chemical Paper Co., Holyoke, Mass.



### Promotions in M&O

Executive management promotions and reorganization of engineering functions of Minnesota & Ontario Paper Co. include: Appointment of CLARENCE LARSON (left) to Vice President in charge of Operations, the advancement of E. L. LAMB (right) to Director of Manufacturing, and creation of a Central Engineering Division headed by J. H. DAVIDSON (right) Chief Engineer. They will report to Executive Vice Pres. Robert Faegre.

W. D. VAN AKEN is new Midwest District sales mgr. for Spencer Chemical, working out of Kansas. His home is Prairie Village, Kans.

DR. ROY WHITNEY of the Institute, Appleton, Wis., according to his friends, has a robin friend at his home who insists on being handled by Roy, and won't leave him, either indoors or out.

F. LEROY ZELLERS, mill mgr., Chillicothe Paper Co., is finishing a term as president of Chillicothe's Rotary Club. Years ago he was also president of Niles City, Mich., Rotary.

HAROLD E. GIDDINGS has been named district sales manager in Milwaukee for industrial rubber products, United States Rubber Co. He was formerly acting sales manager in Boston. FRANK T. LYNCH, a field specialist, has been named assistant sales manager of the Chicago district.

GARDNER BOARD AND CARTON CO. announces these promotions: DUNCAN BROWN has been promoted from mgr., Lockland mfg. division, to the new position of asst. to the vice president, mfg. He was succeeded by FRED BARBER, former mgr., Middletown mfg. division. The latter was succeeded by WILLIAM CSELLAK, former supt., Middletown carton plant. He in turn was succeeded by EDWARD T. (NED) TURNER, JR., former technical supervisor, Lockland board mill.

### SOUTHERN NEWS

**Wright is Supt. at Mobile;  
Crowder Joins St. Regis**

GERALD WRIGHT has been promoted to paper mill supt., International Paper Co., Mobile, Ala. He went there from IP's Camden, Ark., mill where he gave long service under Mgr. ALBERT G. ROZYSKIE.

Continued on page 18

Are you paying for **QUALITY?**  
Are you getting **QUALITY?**

# CAMCO



When you specify CAMCO on your stainless steel fitting requirements you are specifying **QUALITY**—without paying a premium. These fittings are priced in line with competition. How do we do it? CAMCO concentrates ALL of its facilities, efforts and thinking to the manufacture of stainless steel fittings only. The resulting economies are translated into quality and passed on to you.

**FLANGES:** Manufactured to both the ASA and MSS standards covering stainless steel flanges. All flanges to ASA specifications are DROP FORGED and are permanently marked with size, pressure rating, material identification, trademark, and heat numbers—(the key to certificates of analysis and corrosion coupons when required). All flanges to MSS standards are machined from DROP FORGINGS to 4" IPS, (Weldneck flanges to 1" IPS only) and from sound castings in sizes 5" IPS and higher.

**SCREWED FITTINGS:** All ells and tees to 3/4" IPS inclusive and all cylindrical fittings to 2" IPS inclusive (caps, couplings, plugs, bushings and unions) are manufactured from DROP FORGINGS in our 150 lb. line of fittings. Independent outside tests have indicated that these fittings can be rated 1000 lb. CWP. Fittings in higher sizes of our 150 lb. line are machined from sound castings.

**AVAILABILITY:** Sold and stocked by distributors throughout the country and backed by large stocks at the plant for requirements in excess of normal.

Use attached coupon for Flange Dimensional Slide Rule and Catalog covering complete line.

**MAIL TODAY**

CAMCO Products, Inc., 445 State Street, North Haven, Conn.

Gentlemen:

☐ Please send Flange Dimensional Slide Rule.

☐ Catalog #653 covering complete line.

☐ Furnish address of area distributor.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City and State \_\_\_\_\_



445 STATE STREET  
PRODUCTS, INC. NORTH HAVEN, CONN.





**"SAVINGS** in operation and maintenance  
first year were *more than* cost of four  
**Yarway Digester Blow Valves"**



**T**HAT was the experience of a large Florida mill after they installed YARWAY Seatless Motor Operated Blow Valves on their digesters.

Clean, fast blows eliminated production delays. Expensive liquor loss from leaking valves ended. Remote control of motor operation reduced operating costs.

Continued satisfaction has resulted in installation of additional YARWAY Digester Valves for expanded plant facilities.

Such records are not unusual and new features like the YARWAY 17/4 PH stainless steel plunger and automatic lubricator, combined with improved operating control, make YARWAY Seatless Digester Blow Valves an even better buy today.

You may choose between hydraulic-cylinder or electric motor operated valves, all remotely controlled.

**YARNALL-WARING COMPANY**  
103 Mermaid Avenue, Philadelphia 18, Pa.  
BRANCH OFFICES IN PRINCIPAL CITIES

For the full story  
on Yarway Seatless  
Digester Blow Valves  
write for this free Bulletin B-440.

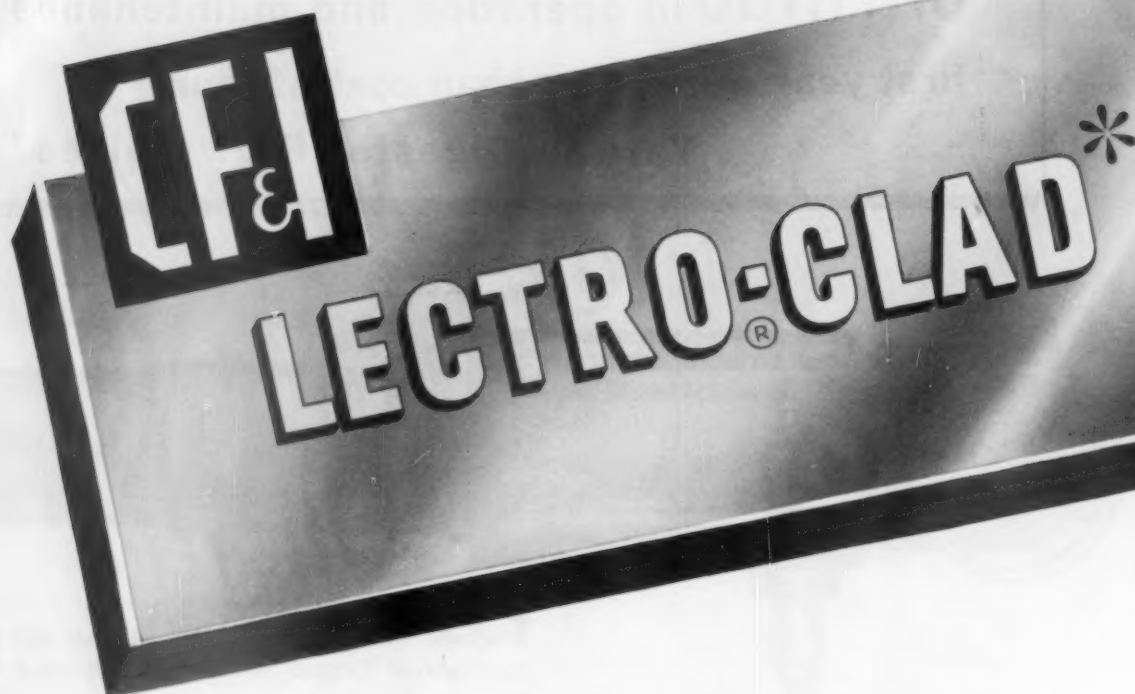


**YARWAY**

**digester blow valves**



*announcing...*



*for economical protection  
against product contamination  
and discoloration*

**\*made by the Bart Process**



# Nickel Plated Steel

Now you can give your products protection against contamination and discoloration during processing, storage and transportation . . . and at a surprisingly low cost! It's possible through the use of CF&I LECTRO-CLAD Nickel Plated Steel, electroplated by the patented Bart Process.

For over ten years, the Atomic Energy Commission and leading chemical processing firms have used pipe and fittings nickel-electroplated by the Bart Manufacturing Corporation process. Now, by combining Bart's experience in this field with CF&I's wide range of research facilities, this process has been extended to produce CF&I LECTRO-CLAD plate and sheet as well as pipe and fittings.

These steel products have all the strength of regular carbon steel; in addition, they're coated with a

uniform, heavy layer of metallic nickel that's over 99% pure. This gives much better protection against product contamination and discoloration than bare carbon steel or steel protected with various coatings.

What's more, CF&I LECTRO-CLAD Nickel Plated Steel can be shaped and fabricated by all of the usual methods without damage to its nickel coating. Bend it . . . weld it . . . roll it . . . the protective nickel layer will not check, spall or flake!

Perhaps you can use CF&I LECTRO-CLAD Nickel Plated Steel to excellent advantage in your product handling, transportation and storage operations. For full details, contact the nearest district sales office listed below.

## Claymont Steel Products

Products of Wickwire Spencer Steel Division • The Colorado Fuel and Iron Corporation  
Wilmington, Delaware



2942

Abilene • Albuquerque • Amarillo • Atlanta • Billings • Boise • Boston • Buffalo • Butte • Casper • Chicago • Denver • Detroit • El Paso • Ft. Worth • Houston • Lincoln (Neb.) • Los Angeles  
New Orleans • New York • Oakland • Odessa • Oklahoma City • Philadelphia • Phoenix • Portland • Pueblo • Salt Lake City • San Francisco • Seattle • Spokane • Tulsa • Wichita  
CANADIAN REPRESENTATIVES AT: Edmonton • Toronto • Vancouver • Winnipeg

### OTHER CLAYMONT PRODUCTS

Stainless-Clad Plates • Carbon and Alloy Steel Plates • Flanged and Dish Ends • Manhole Fittings and Covers • Large Diameter Welded Steel Pipe • Flame Cut Steel Plate Shapes



### SOUTHERN NEWS

**HARRIS K. WILLIAMS**, safety director, Camden, Ark., mill of IP, since early 1951, has been honored by election as president of the Arkansas Association of Safety Engineers. He was formerly safety director at International's Natchez mill.

**GEORGE S. MEEHAN** is new asst. supt., No. 1 Paper Mill, St. Regis, Fla., moving

there from St. Regis, Herring, N.Y. Many grades made at Herring are now produced at Pensacola.

**KARL THORSEN**, retired vice pres. of Camp Mfg., Franklin, Va., recently returned from a tour of the Pacific Coast.

**ERIK ZIMMERMAN**, asst. gen. supt., Chesapeake Corp. of Va., made a trip to Sweden.



### Two Southerners Are Honored While Companies Are Merged

**LAWRENCE S. POLLOCK** (left), President of Pollock Paper Corp., Dallas, now merged with St. Regis Paper, has been elected a Director of St. Regis. Born in Dallas, he founded the company he still heads in 1918 and that year joined the U.S. Army as a Private. He came out before year's end a 2nd Lieut. He is former Pres. of National Paper Trade Assn., and is Pres. of Dallas Symphony Orchestra, Inc. His paper firm has 8 box and paper converting plants in the South and Ohio, and a paper mill in Columbus, O.

**A. W. (AL) SOELL** (right), Director of Purchases, Gaylord Container Corp., St. Louis, now merged with Crown Zellerbach, has been honored by election as President of the National Association of Purchasing Agents. A native of St. Louis, he joined Gaylord in 1930, and was Gaylord Asst. Gen Mgr. in Atlanta before being called back to St. Louis in 1938 as Assistant to the President.

**ROBERT C. (POP) STEWART**, who toured the South for 30 years for Shartle, would like to hear from his old "customers." He is at Hotel Assembly, Apt. 304, 103 3rd St., Santa Monica, Calif. He says "Hollywood is just like the Old South used to be!"

**W. L. LINGLE**, exec. vice pres. of Proctor & Gamble, took over duties also as gen. mgr. of Buckeye Cellulose Division, as a result of retirement July 1 of **WILLIAM F. BOWLD**, following his 60th birthday in June. The latter continues on special assignments.

**EDWARD L. POWELL**, Chattanooga, Tenn., is new executive vice pres. and gen. mgr. of Valentine Pulp & Paper Co., Lockport, La., succeeding **WILLIAM A. ZONNER**, who resigned. Mr. Zonner has had many years in the coating book field and machine building and sales, having been an executive of Bagley & Sewall and Appleton Machine. Mr. Powell was consulting engineer on the Valentine project.

**RALPH DAVIS**, foreman in Champion Paper's Texas pulp mill, is police and fire commissioner for Pasadena, Tex.

**E. LANGFORD JONES** has been appointed director of sales and **CHARLES A. GRANT**, manager of chemical cotton sales, Virginia Cellulose Dept. of Hercules Powder Co.

Continued on page 22



**IF YOU WANT IT FABRICATED  
NWC'S YOUR MAN**

Northwest Copper Works is the pioneer fabricator of Stainless Steel for the Paper Industry... **SERVICE** is a by-word... **FOLLOW-THROUGH** is a Must... **GUARANTEED SATISFACTION** means what it says.

*Typical Illustration of Stainless Steel Fabrication Furnished*



**Specializing in:**

- Stainless Steel Products
- Stainless Steel Tubing
- Stainless Steel Valves
- Stock Valves
- Stainless Steel Fabrication
- Stainless Steel Fittings
- Stainless Steel Pipe
- Copper Smithing
- Lead Linings
- Lead Burning

**1303 N. RIVER STREET  
PORTLAND 12, OREGON**

**PHONE  
MURDOCK 2191**

**NORTHWEST  
COPPER  
WORKS**





IN NEW YORK CITY...

## Lord & Taylor's

"ad-about-town" travels with  
the smartest shoppers

That smart green package is like no other in town. Wherever it travels, everyone recognizes the distinctive color as Lord & Taylor's. Lord & Taylor, like many smart retailers, realizes the value of a unique store color as a "traveling advertisement." Your customers can get this store recognition, if you help each one to choose *his* own package color. Once he selects his color, he'll want to use it on wrapping paper, bags, boxes, gummed tape — every kind of packaging material you sell.

There are hundreds of shades for each prospect to choose from. For technical aid in developing a unique color, or in selecting the proper dye, simply write to: E. I. du Pont de Nemours & Co. (Inc.), Dyes and Chemicals Div., Wilmington 98, Del.

For maximum economy. **Du Pont basic dyes**

For maximum solubility. **Du Pont acid dyes**

For maximum light fastness. **Du Pont dispersed organic pigments:**

"MONASTRAL"• FAST BLUES •

"MONASTRAL"• FAST GREENS •

"LITHOSOL"• PIGMENTS

*Du Pont Dyes*



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

PULP & PAPER — August 1955



# 7 BIG REASONS WHY

# Bingham STANDARD EQUIPMENT

**1** "Double Volute" permits use of special over-hung impellers for handling pumpage containing large volumes of entrained air.

**2** Extra case strength resulting from tension member in "Double Volute" casing.

**3** No dilation. Hydraulic Radial Balance resulting from "Double Volute" design permits shaft to rotate on true center reducing stuffingbox leakage to a minimum.

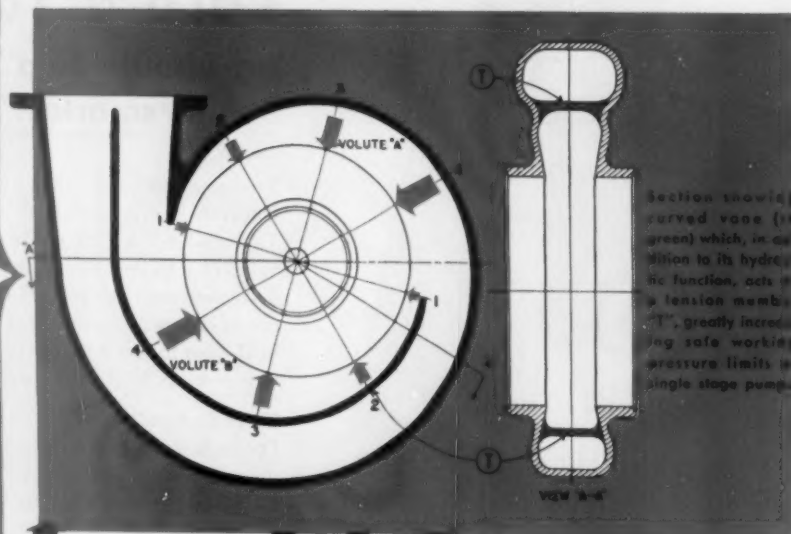
**4** Mechanical Seals. Hydraulic Radial Balance permits mechanical seals to establish and maintain a uniform track between the contacting faces, thereby insuring long life and trouble-free service.

**5** "Double Volute" construction eliminates "side push" of rotating element, reducing maintenance of rotating and stationary parts to a minimum.

**6** Unit type bearing and rotating assembly is easily removable for inspection or repair without disturbing piping or driver.

**7** High operating efficiency.

## The Key to all these Benefits is the Bingham "Double Volute" Design



**No "Side Push".** Diagram of a "Double Volute" single discharge case of single-stage pump (above) showing the equal pressure on the opposite sides of impeller, insuring low maintenance.



**Diagram of "Single Volute" pump case (left) showing unequal pressure at opposite points around the periphery of the impeller. These unequal pressures cause "SIDE-PUSH" on the rotating elements, causing wear of rotating parts and, frequently, high maintenance.**

NEW MAJOR MILLS recently placed in operation, or currently under construction, equipped throughout with Bingham "Double Volute" Pumps.

**BUCKEYE CELLULOSE COMPANY**  
Foley, Florida

**COLUMBIA CELLULOSE CORP.**  
Prince Rupert, B. C.

**E. TEXAS PULP & PAPER**  
Evadale, Texas

**KETCHIKAN PULP & PAPER**  
Ward Cove, Alaska

**MacMILLAN & BLOEDEL, LTD.**  
Nanaimo, B. C.

**RAYONIER, INC.**  
Jasup, Georgia

**SCOTT PAPER COMPANY**  
Everett, Washington

**TASMAN PULP & PAPER**  
Auckland, New Zealand

**WESTMINSTER PAPER CO.**  
Westminster, B. C.

**WEYERHAEUSER TIMBER CO.**  
Everett, Wash. & Longview, Wash.

**POWELL RIVER PAPER CO.**  
Powell River, B. C.

**CROWN ZELLERBACH PAPER CO.**  
Duncan Bay, B. C.

BINGHAM PUMPS TODAY ARE SERVING OVER 200 PULP AND PAPER MILLS



# "DOUBLE VOLUTE" PUMPS ARE IN LEADING PULP and PAPER MILLS

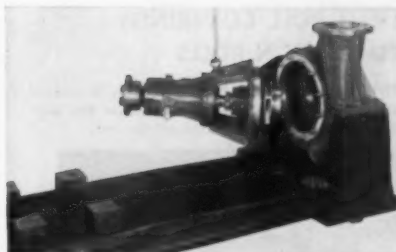
**There are more  
Bingham Digester  
Circulating Pumps  
now in use and on  
order than the total  
number of pumps  
of all other makes  
used for this service.**

In leading pulp and paper mills today Bingham "Double Volute" Pumps are selected as *standard equipment* because of their consistent record over the years for continuous operation with minimum maintenance.

The CF Bingham pump illustrated below, for example, has established an enviable record for dependability and low maintenance in hundreds of pulp and paper mills — but no more so than a dozen other types of Bingham Pumps now serving the pulp and paper industry.



Bingham CF "Double Volute"  
Process Pumps mounted on  
floating base, used in diges-  
ter circulating systems.



## EASY ACCESSIBILITY

Bingham Type CF Process Pumps feature unit type bearings and rotating assembly which is easily removable for inspection or repair.

Bingham "Double Volute" Pumps will best serve your pulp and paper mill operations, as they are now serving leading pulp and paper mills everywhere. Write to your nearest Bingham office for "Double Volute" Bulletin, or send data on your pumping problem.

**Bingham**  
SINCE 1921

**BINGHAM PUMP COMPANY**

General Offices: 2800 N.W. Front Avenue, Portland 10, Oregon  
Factories: Portland, Ore. • Vancouver, B.C., Canada



## SALES AND SERVICE OFFICES

BOSTON, MASS.  
CHICAGO, ILL.  
DENVER, COLO.  
HOUSTON, TEXAS  
KANSAS CITY, MO.  
NEW ORLEANS, LA.  
NEW YORK CITY, N.Y.  
PHILADELPHIA, PA.

PITTSBURGH, PA.  
SAN FRANCISCO, CALIF.  
SEATTLE, WASH.  
ST. LOUIS, MO.  
ST. PAUL, MINN.  
TULSA, OKLA.  
TORONTO, ONT., CAN.  
VANCOUVER, B.C., CAN.



### CANADIAN NEWS

#### New President Played For Notre Dame's Rockne

M. JOSEPH FOLEY, new president of Powell River Co., was a member of one of the late Knute Rockne's famous football squads at Notre Dame in the early '30's. His brother, HAROLD, now Powell River chairman, also graduated from Notre Dame, 1921.

JOHN T. CULLEN, who has been in the industry in Canada for 20 years, latterly with Anglo-Canadian Pulp & Paper Mills and formerly with Price Bros. & Co., has been appointed industrial engineer with Fraser Cos., Ltd., and its subsidiaries. He will headquarter at Edmondston, N. B.

E. W. CAMPBELL, in charge of Crown Zellerbach's industrial and public relations in British Columbia many years, has been elected vice president, industrial relations, of Crown Zellerbach Canada Ltd.

CECIL HARMSWORTH KING, director of Anglo-Canadian Pulp & Paper Mills,

also board chairman of the London Daily Mirror and Sunday Pictorial, recently visited Dryden Paper Co., Anglo-Canadian enterprise.

WILLIAM McMAHAN, vice president, Canadian Forest Products, Vancouver, was one of the hosts at an official dedication of the company's Sechelt Tree Farm. TOM WRIGHT, chief forester, and others explained the objective.

LOUIS A. JURGENSEN, new paper mill superintendent, Ontario & Minnesota Pulp & Paper Co., at Kenora, Ont., reports to E. S. ANDERSON, paper mill general supt. for both Canadian mills. Mr. Jurgensen, 22 years with O-M, started at 17.

SAM MANN, from Bowaters', London, now secretary-treasurer of Bowater Corp. of North America, holding company for all Bowater operations on this continent, has established headquarters in Montreal.

CHARLES J. CARTER has been appointed assistant plant engineer at Great Lakes Paper Co. in Fort William, Ont. He was formerly with Anglo-Canadian at Quebec City.



#### Visiting Florida Mill

This touring trio were photographed by PULP & PAPER at National Container Corp.'s, Jacksonville, Fla., mill (l to r): HORACE LAURAMORE, Jax representative for Johns-Manville, WILLIAM STREED, President, Streed Fabricators, Birmingham, Ala., and JAMES W. HEMPHILL, Staff Mgr., P&P Industry, Johns-Manville Sales Corp.

DR. RALPH PATTERSON, director of planning, Powell River Co., Vancouver, and MORLEY PATTERSON, assistant manager, Crown Zellerbach Canada Ltd., Ocean Falls, B.C., brothers, attending the annual Summer meeting of the technical section, Quebec City.

R. W. BLATCHLEY has been appointed comptroller and treasurer of Alaska Pine & Cellulose. His appointment was announced recently by Pres. WALTER C. KOERNER. Mr. Blatchley was with Union Bag and Paper Corp., New York, for 15 years.

## SELF-DOCTORING TOPRESS ROLLS

## rubber covered by GRIFFITH of Portland

THE MOST ADVANCED DEVELOPMENT IN RESILIENT ROLL COVERINGS SINCE THE INTRODUCTION OF RUBBER COVERED SUCTION ROLLS

The Self-Doctoring Topress rolls covered by GRIFFITH will not pick the sheet because a special improved rubber cover compound is used. Breaks in the sheet contacting the Topress Rolls are eliminated. Doctor Blades may be entirely removed from the machine—or their use discontinued.

With the installation of GRIFFITH Self-Doctoring Topress Rolls on an open top press, you gain the advantage of resilient rolls of the hardness required for best operation. This gives better water removal at higher speeds, plus much longer felt life.

Write, Wire or Telephone for Estimate on Your Job

**Griffith**  
RUBBER MILLS

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Western Industrial Rubber Specialists Since 1911

SECOND & THIRD PRESSES—GRIFFITH covered Self-Doctoring Topress Rolls with Doctor Blades and Holders permanently removed from machine.

FIRST PRESS—GRIFFITH covered Self-Doctoring Topress Roll with Doctor Blade off the roll.



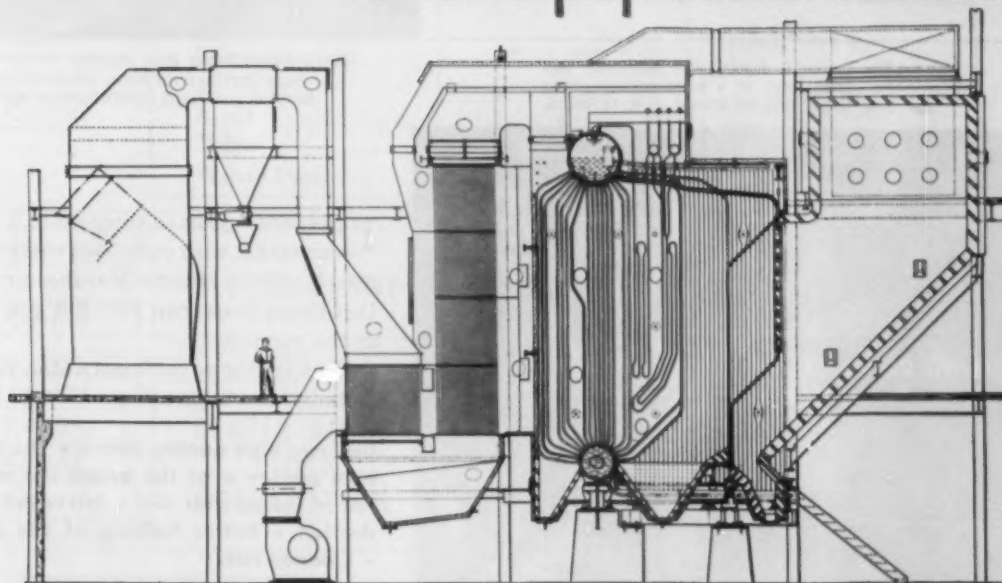
Three GRIFFITH covered S.D.T. Rolls are used on Weyerhaeuser Timber Company's 400-ton-per-day machine at Springfield, Oregon, running at 1,200 ft. per minute.





KETCHIKAN

# to serve pulp mill in ALASKA



Ketchikan Pulp Company—the first pulp mill in Alaska—will produce dissolving pulp employing the Magnesium Bisulphite (MgO) process. This will be the first new plant to use this process.

B&W is the exclusive licensing agent for the MgO process. Each of the two B&W heat and chemical recovery units for this plant is designed to generate 93,000 lb of steam per hour . . . will consist of a two-drum bent-tube boiler with superheater designed to operate at 860 psi and 825 F total temperature, and equipped with Y-jet liquor

atomizers set in a refractory furnace.

In addition to the recovery units, two B&W two-drum Stirling boilers are on order, to be fired with oil and bark. Each power boiler will generate 160,000 lb of steam per hour at 860 psi and 825 F total steam temperature.

B&W invites your inquiries relating to heat and chemical recovery problems for both the sulphite and sulphate pulping processes. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.

## BABCOCK & WILCOX

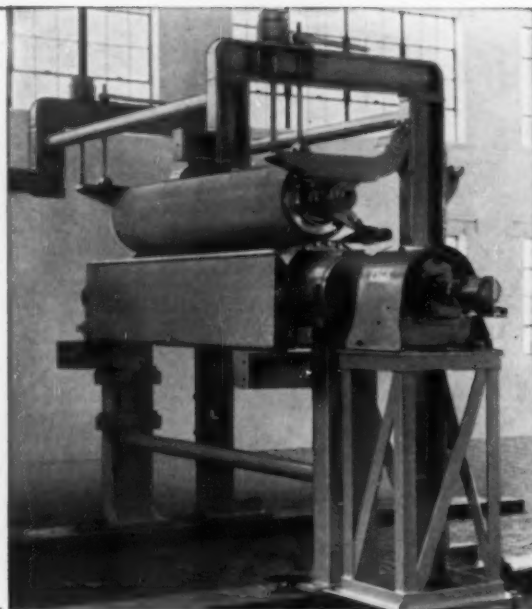


BOILER  
DIVISION

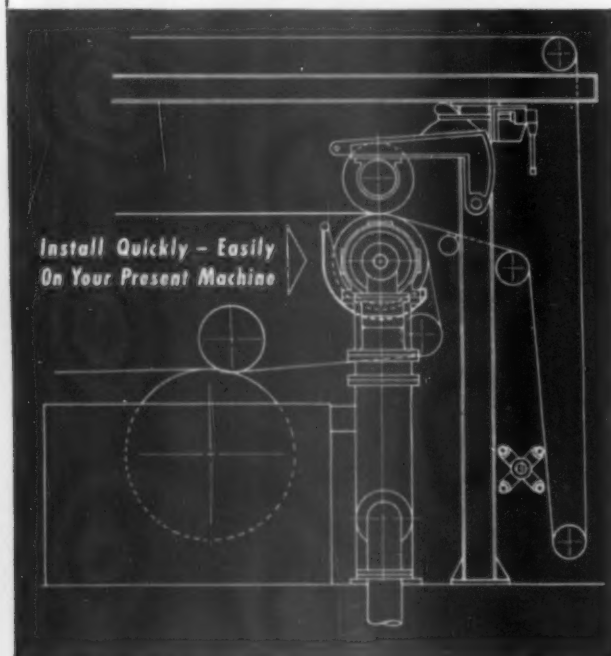
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**This Suction  
Drum Press  
Helps You  
*get orders***



▼ This schematic drawing of a Manchester Suction Drum Press on a board machine shows how simple and economical it is to install.



▲ Hydraulic Helper Drive mounted on the Manchester Suction Drum Press. The 30-inch roll is driven at a maximum surface speed of 400 fpm.

If you are trying to compete in a modern market with outmoded equipment, this up-to-the-minute Manchester Suction Drum Press can help put you back in the running.

Here are the advantages a Manchester installation will give you:

**Uniform high quality board • The same high quality over the entire life of the felt • Longer felt life • Increased production • Better bulking of the sheet • Cleaner felts**

Let us show you how we can produce these money-making, money-saving results in your mill. Write for complete information and quotation.

**THE MANCHESTER MACHINE CO.**

1720 Central Avenue • Middletown, Ohio

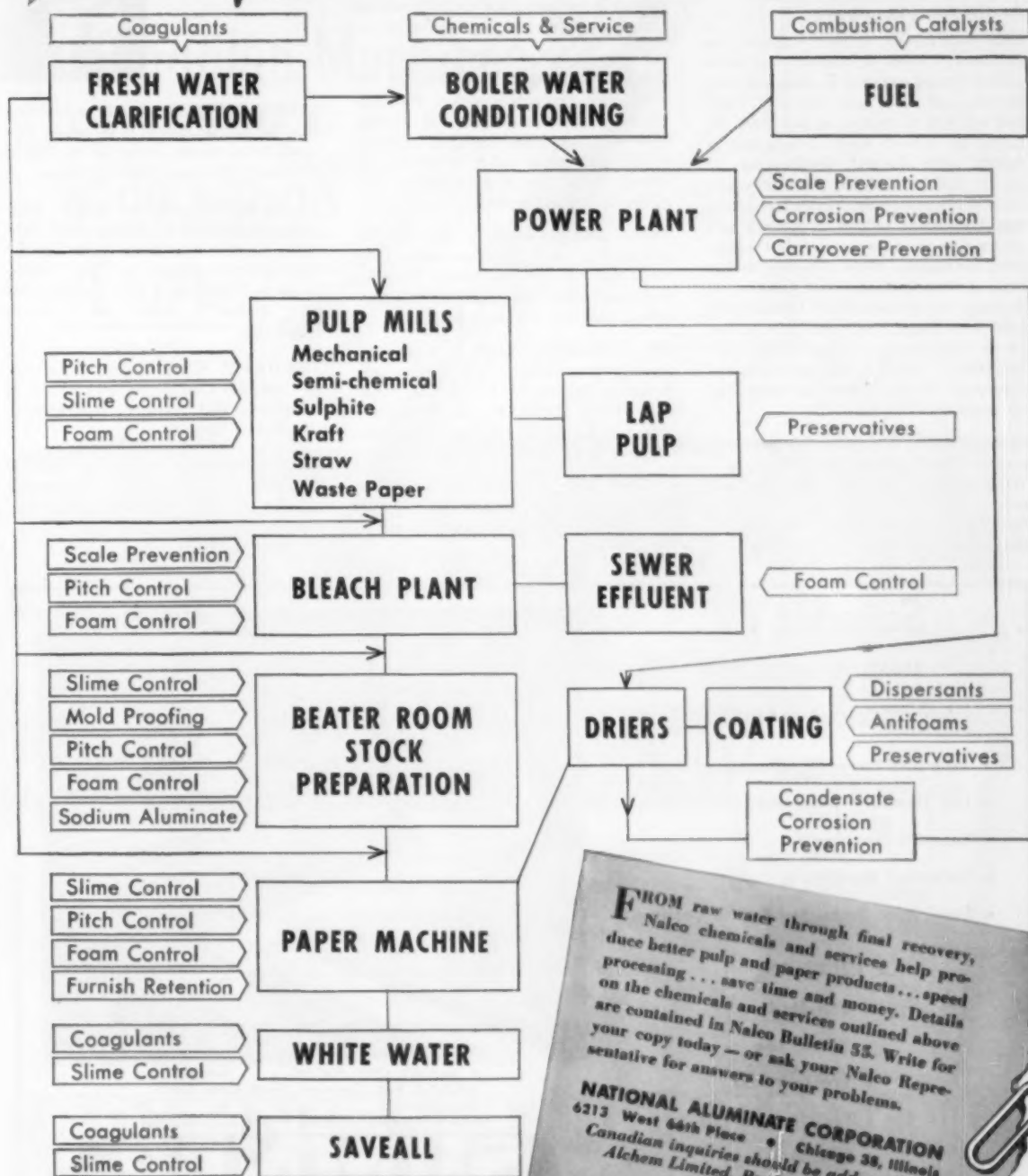
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**OTHER PRODUCTS:** Adjustable Shake Motion • Paper Type Reels • Paper Machine Drives • Size Presses • Rubber-Covered Drilled Suction Press Rolls • Drilled Suction Drum Rolls • Drilled Suction Couch Rolls • Cylinder Molds • Smoothing Presses • Complete Fourdriniers • Winders and Slitters





# CHECK of *Nalco*® PRODUCTS and SERVICES for the PAPER INDUSTRY



FROM raw water through final recovery, Nalco chemicals and services help produce better pulp and paper products... speed processing... save time and money. Details on the chemicals and services outlined above are contained in Nalco Bulletin 33. Write for your copy today — or ask your Nalco Representative for answers to your problems.

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**SYSTEM • Serving the Paper Industry through Practical Applied Science**



## PULP & PAPER

### STRICTLY PERSONAL

#### PACIFIC COAST NEWS

##### Maybach on Antioch Project; Amle Joins Lundberg

LEE MAYBACH, project engineer for processes, Crown Z, Camas, has been named project engineer in charge of construction of CZ's new Antioch, Calif. mill which is to start up in mid-1956. He moves to Antioch Sept. 1 following a month with Central Engineering in Seattle. LEN GREGER, assistant supervisor of electrical maintenance and operation, CZ Camas, will go to Antioch mill next March to supervise electrical equipment installation. Since mid-July he has been at Central Engineering assisting on drawings for Antioch. GUS OSTENSON (also from Camas mill) has been on the job as resident mgr. of the Antioch mill. VICTOR C. GAULT, CZ general safety supervisor, Portland office, has completed 40 years with the firm.

PERC S. BROWN, director and vice president in charge of Nopco Chemical's Western operations, announces it has acquired assets of Griffin Chemical Co., San Francisco. Mr. Brown said this is the initial step in Nopco expansion on

the Pacific Coast. EVERETT GRIFFIN, who organized the Griffin company in 1935 will be associated with Nopco at Richmond, Calif., in an executive capacity.

DALE HOLCOMB has returned to Fibreboard Products Division, Port Angeles, as office manager. ED CAVANAUGH, new Fibreboard res. engineer at Antioch, was a visitor at his old Pt. Angeles haunts. JACK AUSTIN is a new mechanical engineer there.

FRED AMLIE, engineer with G. D. Jenssen Co. since 1927 on sulfite pulp work, has moved to the Pacific Coast to work with HALVAR LUNDBERG, consulting chemical engineer, Seattle.

ED GARRISON, American Cyanamid representative on semi-retired basis, still living in Seattle, made Midwest tours with MATT HENLEY, out of Neenah, Wis., and LAWLER DAVIS, out of Minneapolis, in those states for Cyanamid.

LOIS PETERS is the attractive new receptionist at Port Angeles Division of Fibreboard Products, in case you are a caller there.

J. HAROLD QUIGLEY, veteran Paper Mill Supt., Crown Zellerbach Port Townsend, Wash., mill takes same post in new CZ kraft mill being built at Antioch, Calif.



JAMES STURKEY, Seattle representative for Southwestern Engineering Co., made a two weeks cruise in the Pacific Northwest as a naval reserve officer.

ED BARRETT announces that his company, BARRETT & YOST, 5600 14th N.W., Seattle, has added to its line the Cleaver-Brooks (Milwaukee, Wis.) boilers, evaps and equipment. This company has been testing a sulfite waste liquor evaporator.

THOMAS F. CASS is new senior v.p. of California Container Corp., CC of A subsidiary. WILLIAM P. HOOKER is president and chairman.

LOREN FORMAN, technical director, Scott Paper, Everett, made a recent visit to Appleton, Wis., where he was on the Institute staff, staying there with friends, the BOB McKEES.

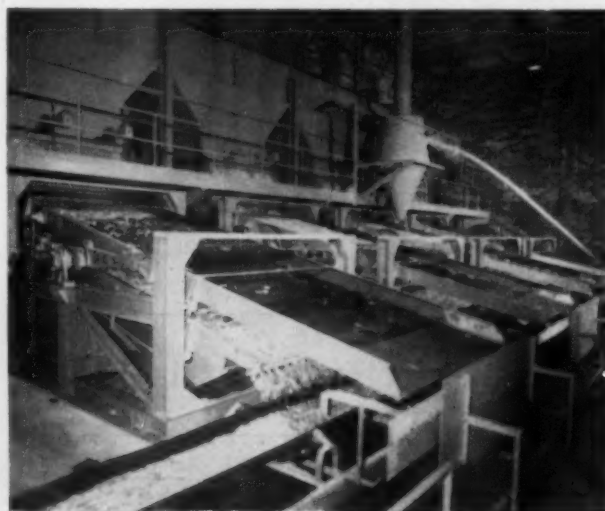
## Sumner . . .

### HEADQUARTERS FOR WOODROOM MACHINERY

- Pulp and Paper Mill Machinery
- Log Handling Machinery
- Sawmill Machinery
- Industrial Machinery
- Steel, Iron, Brass and Bronze Castings

#### CHIPPERS

- Standard
- Whole Log
- Waste-Wood
- Portable
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- Core
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4 SUMNER CHIP SCREENS . . . installed at Ketchikan Pulp Company, Ward Cove, Ketchikan, Alaska.

SIZES AVAILABLE TO MEET EVERY REQUIREMENT

**SUMNER**  
IRON WORKS  
EVERETT, WASHINGTON  
*Since 1892*

In Canada: Canadian Sumner Iron Works Ltd., Vancouver, Canada

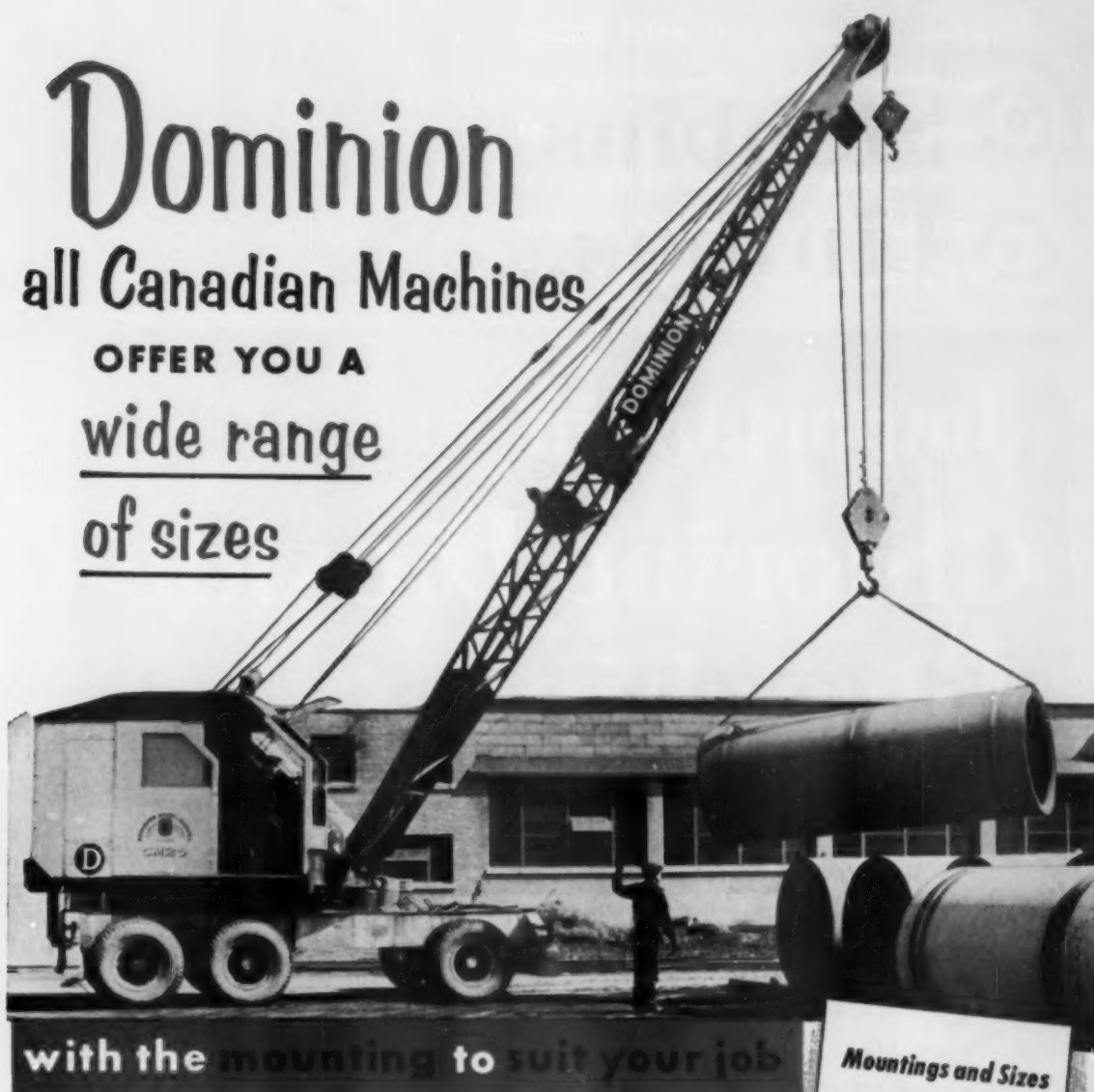
LATEST DETAILS NOW AVAILABLE REGARDING SUMNER VENEER CHIPPERS



# Dominion

all Canadian Machines

OFFER YOU A  
wide range  
of sizes



with the mounting to suit your job

Designed, built and serviced in Canada, Dominion machines are readily convertible to shovel, pullshovel or lifting crane—dragline, hook block, pulpwood grapple, clamshell, piledriver or magnet. An added advantage in operation, to help you maintain constant high output with a minimum of costly delays, is Dominion's factory and field service by fully qualified personnel. Spares are always fully stocked and rapidly supplied.

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- CRAWLER
- RAIL
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In the popular commercial range from  $\frac{3}{8}$  to  $2\frac{1}{2}$  cu. yds. capacity.

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• POWER CRANE AND SHOVEL DIVISION •

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# Stebbins Linings...

## Important in Chlorine Dioxide Bleaching

Approximately 90% of the pulp bleached with chlorine dioxide in plants now operating or under construction will be processed in equipment lined by Stebbins.

Stebbins-lined chlorine dioxide reactors, generators, absorbers, storage tanks and bleach towers, including the very first installation, are giving excellent service.

The pulp industry can depend on Stebbins experience, research, engineering and construction know-how to meet the requirements of new processes.

SINCE 1884  
Specialists in  
Design  
Installation  
and Servicing  
of Linings and  
Tile Tanks

### STEBBINS

Engineering and Manufacturing Company, Watertown, N. Y.

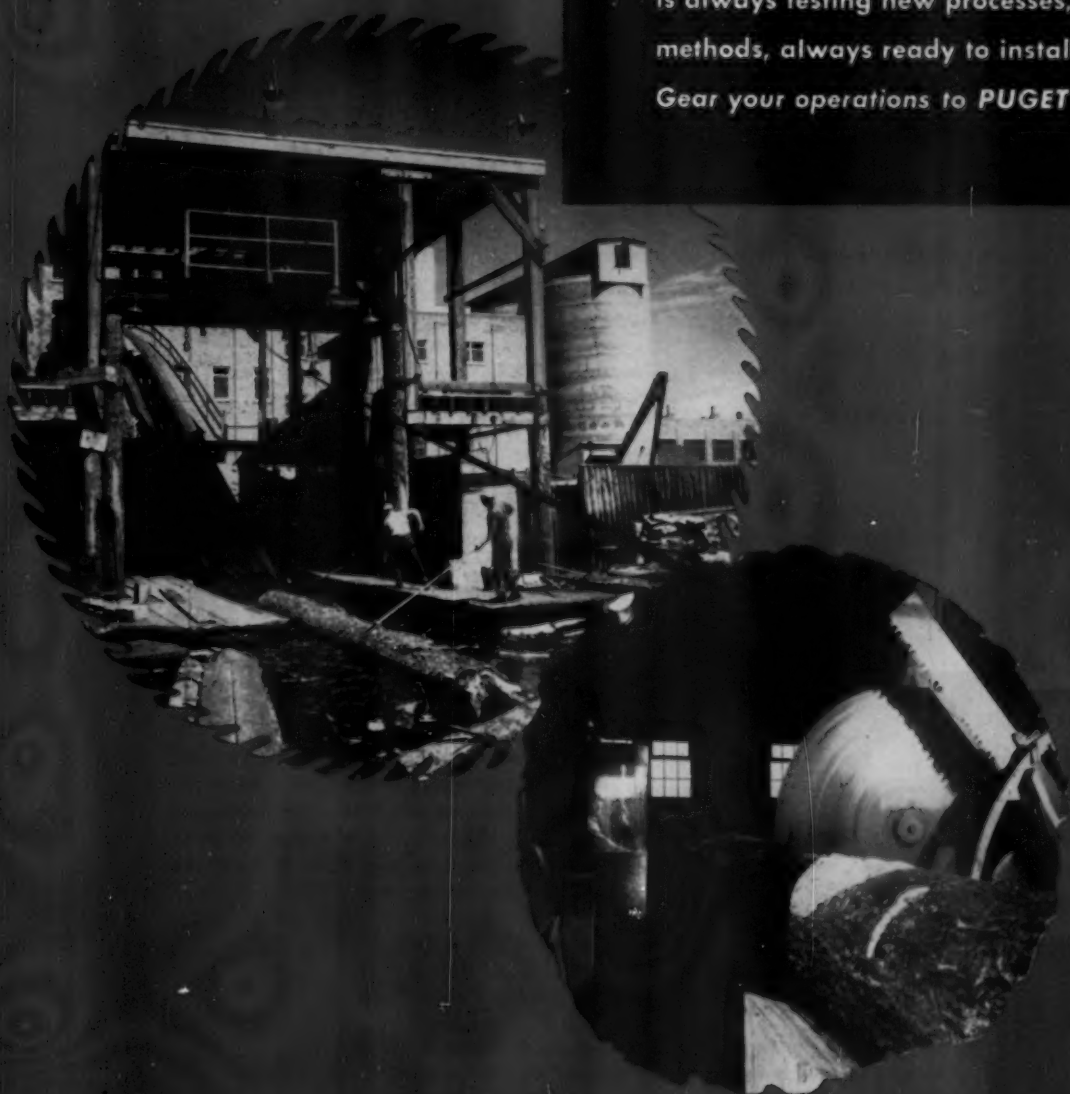
STEBBINS ENGINEERING CORP. — 1504 TOWER BLDG., SEATTLE, WASH.

CANADIAN STEBBINS ENGR. & MFG. CO., LTD. — CASTLE BLDG., MONTREAL, CANADA





**PUGET PULP**—the whitest, cleanest, bleached sulphite pulp  
that we can make is produced particularly for the market.  
To assure converting mills of top quality, Puget management  
is always testing new processes, always alert to improved  
methods, always ready to install new designs in equipment.  
Gear your operations to **PUGET PULP**.

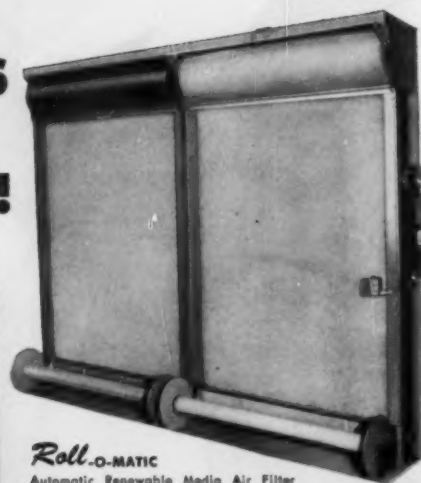


# PUGET SOUND

**PULP AND TIMBER COMPANY**  
BELLINGHAM • WASHINGTON



# TAILORING GLASS FIBERS FOR THE *Roll*-O-MATIC!



*Roll-O-MATIC*  
Automatic Renewable Media Air Filter



## New Media Makes Possible Today's Most Maintenance-Free Air Filter

THEY'RE stretching glass—just one of the many steps involved in its conversion to an efficient, low cost filtering media for the new ROLL-O-MATIC. In final form, it consists of a thick "blanket" of bonded glass fibers possessing the cleaning efficiency, dust holding capacity and high velocity rating of a viscous filtering media, yet a material that can be made in lengths up to 70 feet and is sufficiently resilient and flexible to permit packaging in compact 13" diameter rolls.

With the development of this versatile media, the mechanics of ROLL-O-MATIC design were easy. Mounted in roll form at top of filter, the media moves as a continuous curtain down the face of the ROLL-O-MATIC, and is rerolled on a driven spool at bottom. Movement of media is controlled by an automatic time switch which introduces sufficient clean material into air stream to maintain the desired operating resistance.

What's the end result of all this for the user? Continuous, high efficiency cleaning at an operating cost less than half that of a disposable type filter of equal capacity! For complete facts, contact your local AAF representative or write for ROLL-O-MATIC Bulletin No. 248.



# American Air Filter

COMPANY, INC.

American Air Filter of Canada, Ltd., Montreal, P. Q. • 297 Central Avenue, Louisville 8, Kentucky

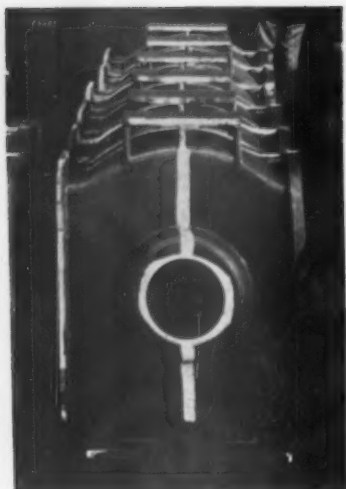




TORSEL BORLING

**MADE IN BELOIT** ...Dryer gear cases at Beloit Iron Works. / For further details, please turn the page.





## MADE IN BELOIT

The rugged, heavy-duty dryer gear cases in the photograph on the preceding page are shown in process in the Boring Bar Department at Beloit Iron Works, Beloit, Wisconsin. Before reaching the machine shop, each casting is carefully inspected and layout lines are drawn to guide the machining operation. The 10-ton bridge crane quickly positions the heaviest casting for machining setup. Skilled machinists, in an up-to-the-minute plant employing the most modern machine tools, produce a finished product of highest standards.

*your partner in papermaking*

# BELOIT

PAPER MACHINERY



WHEN YOU BUY BELOIT...YOU BUY MORE THAN A MACHINE!



*saleable*  
for more **tons per day**

*A. H. Lindquist (center), Production Manager, and Donald K. Fuller (right), Mill Superintendent, Fibreboard Products Inc., San Joaquin Division, Antioch, California, discuss felt operation with L. A. Brown (left), Albany Felt Sales Engineer. The six-cylinder board machine in the background specializes in the production of high quality board for milk and ice cream cartons. Considered one of the most efficient production units for this type of board, it utilizes Albany Felt as a major source for all positions in a consistent effort to produce "more saleable tons per day"!*

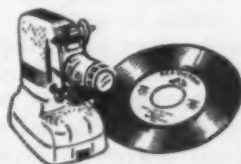


## *call in your Albany Felt sales engineer*

When you're faced with a tough operational problem relating to felts—drainage, finish, life, or high-speed requirements—call in your Albany Felt sales engineer! Albany Felt sales engineers are trained technicians, experienced men with the "know how" to help you get the most efficient production from your felts. In addition, they are your liaison with the industry's leading service engineers and designers, and are backed

by outstanding chemical and mechanical laboratories, and an extensive research and development program.

Take advantage of this experience *plus!* Call in your Albany Felt sales engineer to help solve your felt operation problems! He'll show you how the proper application of Albany Felt can help you maintain top production and sheet quality. The result: **"MORE SALEABLE TONS PER DAY."**



**SLIDE FILM ON FELT MAKING.** If you're looking for an interesting, informative presentation for your training program or a mill personnel meeting, let us schedule a showing of Albany Felt's color-sound slide film "Felts for Paper Machines." Write today for full information.

## **ALBANY FELT COMPANY**

*"World's Largest Manufacturer of Paper Machine Felts"*

**MAIN OFFICE AND PLANT, ALBANY 1, NEW YORK**

*Other plants: Hoosick Falls, N. Y.; North Monmouth, Maine; Cowansville, Quebec*



# West Virginia Pulp and Paper Company Pioneers New Waste Treatment Process

## Dorr-Oliver Equipped Plant Sets Pattern For Industry

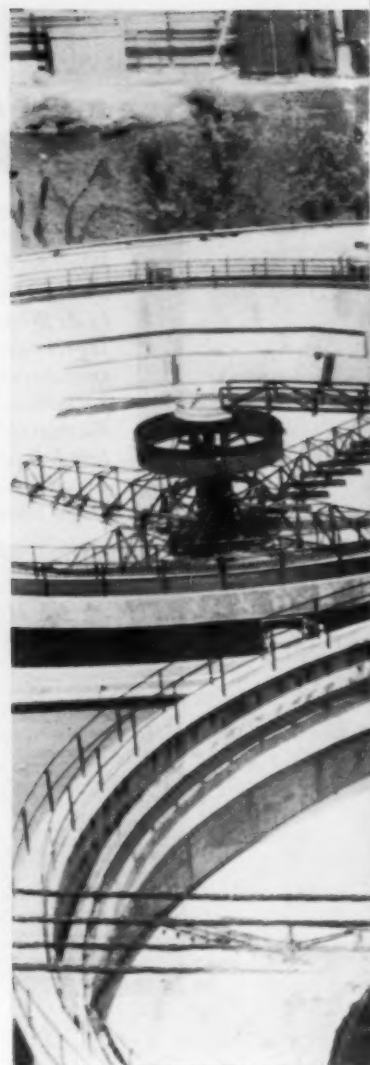
**Covington, Va.** Industrial waste treatment has taken a major step forward with the start-up of this new plant at West Virginia Pulp and Paper Company's Covington, Va., mill. A "first" for the alkaline pulping industry, it points the way toward a solution of these tough-to-handle wastes. Two years of pilot plant work went into the final design and the Covington mill's River Research Group worked closely with the National Council for Stream Improvement

throughout all phases of the project. The firm of Weston, Eckenfelder and Hood was also called in to make an intensive round-the-clock analysis of pilot plant results.

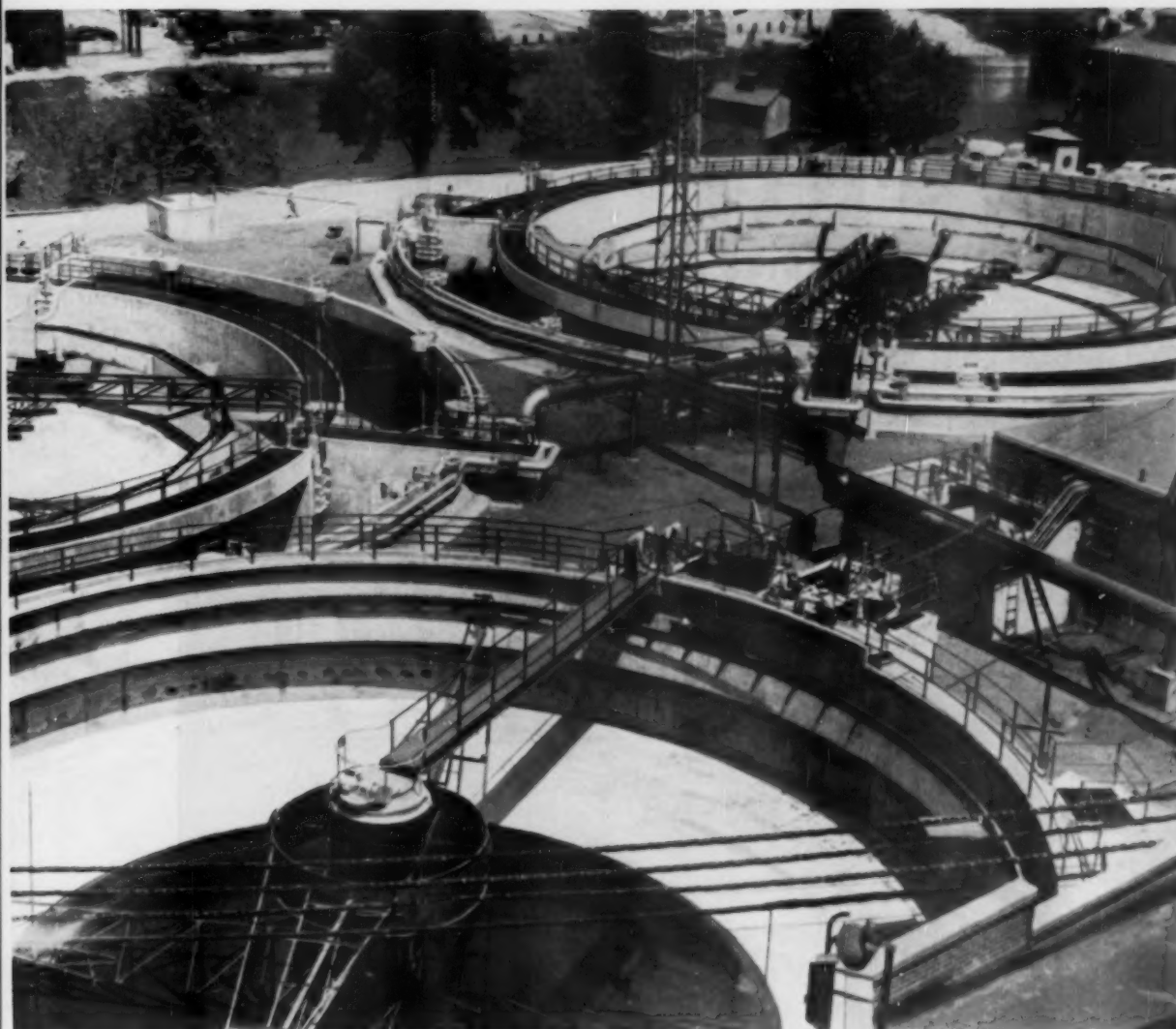
The flowsheet as developed is unique. Basically it employs the activated sludge process, one of the standard methods for treating municipal sewage. A departure from standard practice is the addition of certain nutrients essential to the life of the bacteria

which carry out the treatment process. Another is split treatment providing primary sedimentation for the portion of mill wastes containing solids and then parallel aeration and final sedimentation for the entire flow. A third is the use of complete instrumentation with one control panel governing the process and recording results.

Average treatment plant design is 16 MGD with a maximum capacity of 25 MGD. Major







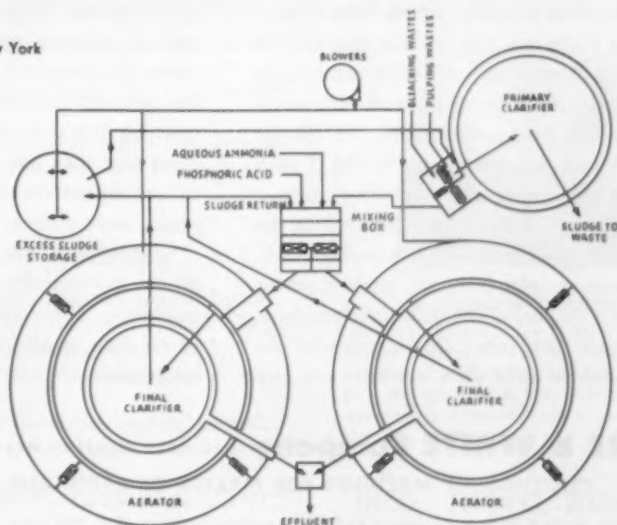
General view of the plant during final stages of construction. Dorr Primary Thickener is in foreground with Currie Clarifiers in rear.

Consulting Engineers: GIBBS & HILL, INC., New York, New York

equipment units include a Dorr Primary Thickener and two Currie Clarifiers.\* These latter units employ Dorr Final Clarifiers surrounded by annular aeration channels. In this way two distinct phases are carried out in a single unit. When the plant reaches full operation an estimated BOD reduction of 80-90% will be made in the mill effluent being discharged to the Jackson River.

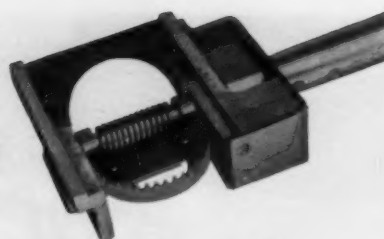
**Dorr-Oliver Incorporated,  
Stamford, Conn.**

\*Trademark, Reg. U. S. Pat. Off.





# NEW MOORE & WHITE PAPER SAMPLER



safely snips samples from a moving web



At last it is possible to take a sample from a moving web on a paper machine without danger of a break. A trap device with V-shape razor-sharp teeth follows the direction of the web and neatly and quickly snaps the desired sample. This sample can be put into a weighing bottle within 3 to 5 seconds, thus assuring precise laboratory analysis.

It is possible to take the samples from within the dryers and thus develop a complete drying curve. You can secure samples from any position across the web for the purpose of checking moisture, basis weight, thickness, and other characteristics of the paper. This can be used after wet felts and also

at the dry end. Thus the M&W Paper Sampler permits an accurate gage of the dryer's capacity—taking the guesswork out of an important aspect of the operation and permitting speed-up of the entire machine. It is quite likely that many mills will discover that they have excess drying capacity, and so can increase speed without additions. More speed, more tonnage, more profits!

Every paper mill should have one of these Moore & White Paper Samplers for each of its machines. They will earn their moderate cost in no time at all. Write us today for complete information.

**The MOORE & WHITE Company** 330 EAST HUNTING PARK AVENUE • PHILADELPHIA 24, PA.  
CUSTOM-BUILT MACHINES FOR MAKERS OF PAPER AND PAPERBOARD

In the New England states, Moore & White is represented by Orton Corporation, Fitchburg, Mass. West Coast representative, Stephen Thurlow, Seattle, Wash.





**High up.** Welders install top course of a new "Inconel protected" digester at a southern kraft mill. The men are working

on the "steel side." Interior surface gets Inconel protection through Hortonclad® process of Chicago Bridge & Iron Co.



**Welding progresses** smoothly on the "Inconel side" of the Hortonclad steel plate. Although the Inconel layer amounts to only 10% of the thickness of the 1.14" plate, it provides all the corrosion resistance of solid Inconel — at a worthwhile saving in cost.



**Now dome goes on.** Two types of Inco welding electrodes, made specifically for welding Inconel and Inconel-Clad Steels, were used. The welds, incidentally, are all stress relieved in the field.

## Put brakes on accelerated corrosion in sulfate digesters...with Inconel

Are alkaline pulping liquors causing corrosion problems in *your* digesters?

Then follow the lead of large southern kraft mills. Use Inconel® linings.

Inconel offers excellent resistance to corrosion by sulfate liquors. It's not affected by stress corrosion cracking. And has a thermal expansion coefficient close to that of carbon steel.

Get "Inconel protection" — now!

### How to get "Inconel protection"

Efficient fabrication techniques have been developed by Chicago Bridge & Iron Co., Chicago 4, Ill. . . A. O. Smith Corp., Milwaukee 1, Wis. . . Lukens Steel Corp., Coatsville, Pa.

For expert help in planning a new alkaline digester, write to any of these companies.

And for further information on materials testing, selection or fabrication, consult Inco's Corrosion Engineering Section.

**THE INTERNATIONAL NICKEL COMPANY, INC.**  
67 Wall Street New York 5, N. Y.



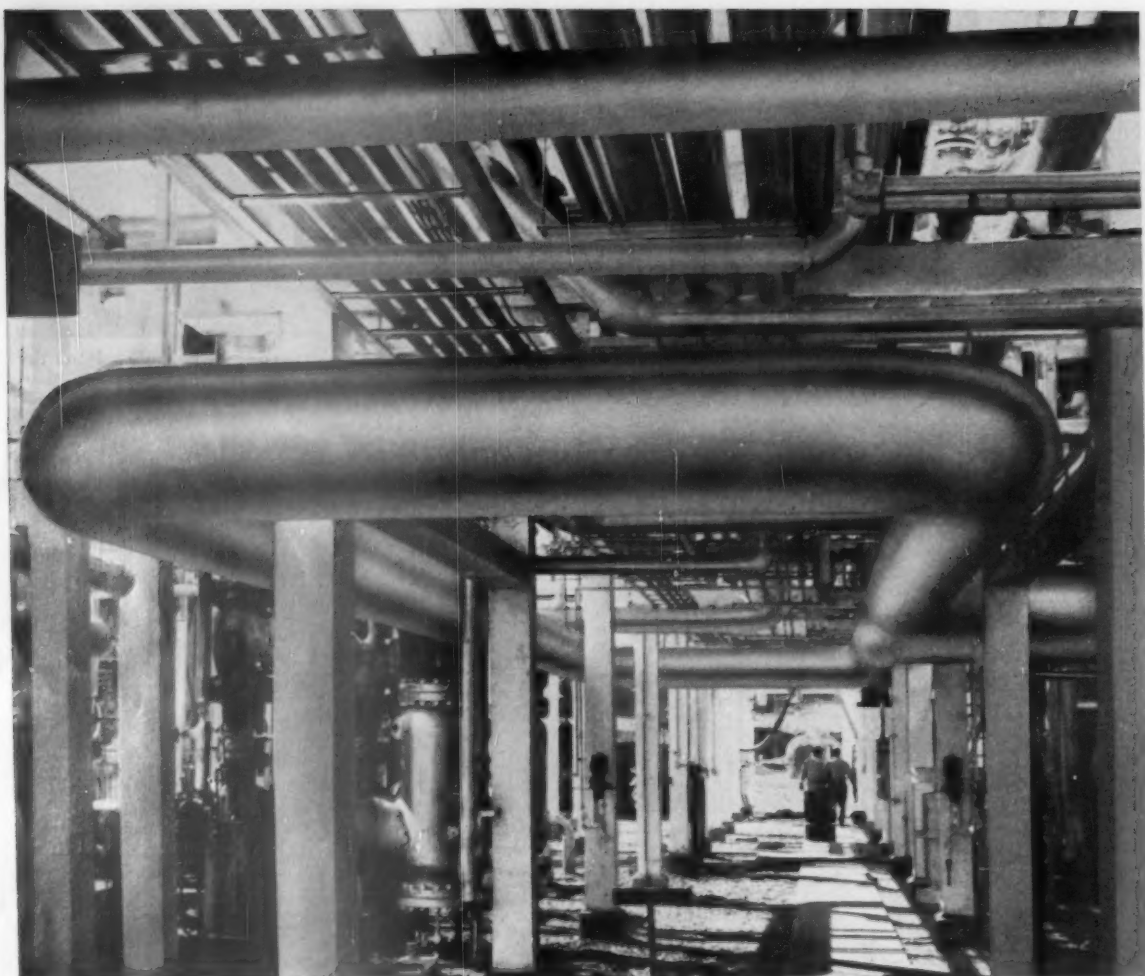
### Valuable booklet — FREE!

"Practical Solutions for Metal Problems" is a handy, 34-page booklet. Full of information. Has many photos of actual installations. Shows you exactly how other pulp and paper mills have solved their problems. You may find in it the solution to yours. Write for a copy — today.



**NICKEL ALLOYS**





## Less heat loss at joints with single-layer Unibestos® Pipe Insulation

Tests prove that Unibestos single-layer pipe insulation actually provides greater protection than other nonfibrous *double-layer* insulations which cost more to install. Unibestos is made of Amosite—the long-fibred African asbestos. These fibers interlock with one another to prevent heat loss at horizontal and longitudinal joints.

While most insulating materials show a pronounced shrinkage at high temperatures, Unibestos has no measurable shrinkage at 1200°F. It will not powder, pulp or wash off, even under heavy moisture conditions, and when dry, Unibestos resumes its original thermal and physical characteristics.

**EASY to install . . . easy to remove.**

Unibestos can be cut, mitered and handled easily. The fabrication of insulation for tees,

valves, flange covers, etc., is a fast, low-cost operation. Because of its unusual strength and durability Unibestos can be removed and replaced with little or no loss of material.

### STANDARD PRODUCTION SIZES

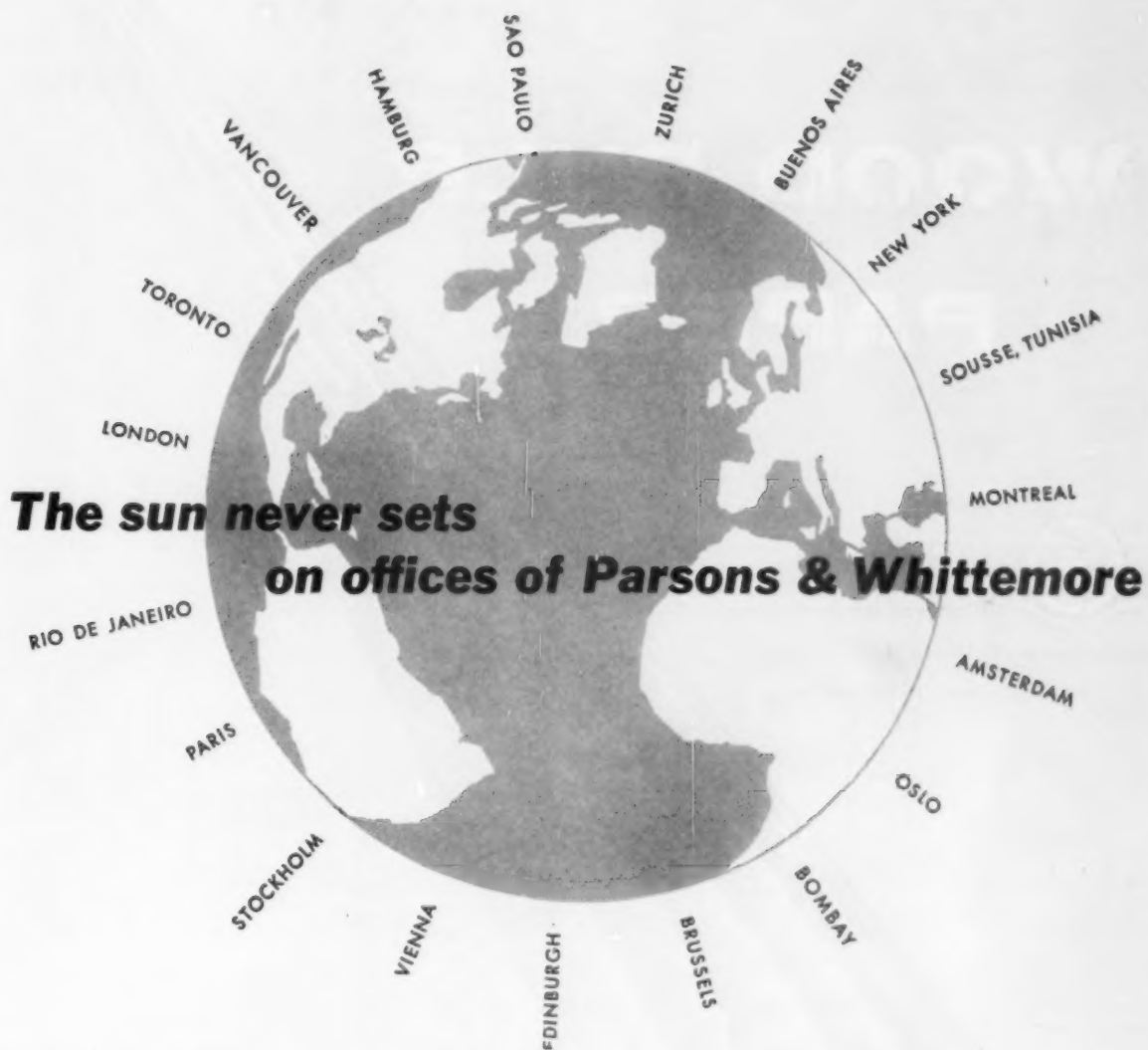
Unibestos Pipe Insulation is regularly made in 3-foot lengths for pipe sizes from ½" through 24", in standard thicknesses through 5". Unibestos Block Insulation is made in 6", 12", 18" or 36" widths and in thicknesses from 1" through 3" in ½" increments.

For complete information, write  
for descriptive Bulletin 109C



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paper  
paper-making machinery  
graphic machinery**

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295 MADISON AVENUE, NEW YORK 17, N. Y.



FIRST REPORT ON AN EVENT AT CINCINNATI CONVENTION:

## What Should Industry Do About GAW?

National Convention of Superintendents Association hears economist say guaranteed wage "nothing to be scared of"

Here is the first published report on a discussion at the Superintendents Convention of one of the biggest, and most controversial, problems facing American industry today—GAW.

● The wheels of a carefully-planned, diversified program at the 36th annual National of the American Pulp and Paper Mill Superintendents Association were grinding past the midway mark of three full days of speeches last June 16. Then a 41-year-old, dark-haired, chunky ph.d. from Wharton Business School, and a teacher and writer on economics for the past 17 years, moved briskly to the microphone in the Netherlands Plaza "Hall of Mirrors" at Cincinnati.

He was the last programmed guest speaker of the convention. There had been over 40 speakers before him, it was well past noon of the third day, before he was through, and an audience which started that morning with at least a couple of hundred or so of mill and supply company executives had been trickling out.

But even before Gene Ward, the new Affiliates chairman, stepped forward to introduce the speaker, some executives—we noted a felt company executive, a paper company vice president, etc.—who had marked their programs for this event, had been drifting in, too, anticipation getting the better of their hunger pains, if any.

"The Practicality of a Guaranteed Annual Wage," was the subject discussed by Dr. Alfred Kuhn. He had no written speech; talked rapidly, but clearly, on an obviously familiar theme. By the time he got through no one could accuse him of "pulling any punches."

To him, GAW is not anything for industry to be afraid of—he analyzes it as just another way of paying a wage boost. He is convinced it will not interfere with management control of its mills and plants, nor will it throw a monkey wrench in the machinery of industrial progress.

"SCARE STUFF"—Because of the late hour, no questions were asked from the floor, but PULP & PAPER checked its notes with him to be sure he was not misquoted. And he volunteered this comment, which his audience did not hear:

"I forgot one point that I wanted to make in my talk. The Chamber of Commerce and the National Association of Manufacturers are giving poor service to industry by putting out scare stuff about GAW."

In opening, he said that such firms as Procter & Gamble and Geo. A. Hormel & Co. have had "a GAW for years, but now we have something that is altogether different from theirs, under the Ford-UAW agreement, the

workers pay themselves a guaranteed annual wage."

He digressed then on the subject of "fringe benefits" in general and he said "any fringe benefits paid by management equal what could have been paid in wages; the worker, in effect, takes a cut which never shows in gross pay."

"THE WORKER GUARANTEES"—Under the Ford pact, he said the company does not guarantee GAW, if the fund runs out, but the worker does guarantee it. He pointed out there must be legislative action in states where Ford operates, so workers will not be denied state provisions for unemployment compensation. He went on:

"Security is desirable. Managements set up contingency funds, reserves, etc., they diversify their markets, for security. The worker is in reality saving for a rainy day with GAW. It should have the effect of stabilizing industry."

"The automobile industry has never made serious moves in the past to stabilize its sales and its production. There is little or no contra-seasonal advertising, no discounts in slack sales periods, etc. GAW would also have the effect of stabilizing the steel and the glass industries, too."

"The Hormel meat firm finds as a

result of its own GAW that workers own more homes, marriages occur at a younger age. Next to homes, automobiles are the biggest durable goods investment there is."

Dr. Kuhn continued:

"GAW is contracyclical. It takes money out on the upswing, to use in down periods. It will stabilize all industries."

"The GAW drive is going to go on. It is going to expand."

"Management should avoid a 'do or die' attitude. Both companies and unions should make a thorough study of it."

"How regular has been your employment? What is the turnover, life expectancies? Are you expanding or

### Why NAM Opposes GAW

The board of directors of the National Association of Manufacturers recently passed a resolution which condemned what it called "the so-called guaranteed annual wage plans imposed on certain automobile companies."

A meeting in Chicago attended by more than 800 businessmen, sponsored by NAM, was described officially as dealing with "America's Economic Crisis—the Guaranteed Annual Wage."

After the session, the board passed the resolution opposing auto industry GAW agreements on the grounds that they:

1. "Create inequities among employees."
2. "Conflict with many state laws."
3. "Deplete state unemployment compensation reserves."
4. "Jeopardize financial strength of many companies, especially newer and smaller ones which can be a major source of new jobs."
5. "Inevitably have seriously damaging effects on our American economy, if widely adopted."



not? At your worst period, how low would you drop? Should GAW be dealt with on an industry-wide basis or firm-by-firm? Can you stabilize your own operations if they are not already stable?

"GAW can be put into effect like all fringe benefits—so many cents per hour. As a movement, it is going to spread because there has been an essential urge behind it for many years."

**HE ANSWERS HIS QUESTIONS—**Then Dr. Kuhn asked some key questions. And answered them himself.

**Q.** Will it reduce the incentive to take risks and invest capital?

**A.** It can't discourage management any more than a wage increase.

**Q.** Will it interfere with management control of a plant?

**A.** No. Management and labor have gone into joint safety programs, joint pension funds, etc., together. Management still will decide its own business. I am positive that the unions would not do anything to ruin business.

**Q.** Will GAW bring on a socialist state?

**A.** I can't see it. My view is that

anything we can do in the free enterprise system (like this) is to knock out one more prop from under socialism.

**HIS CAREER—**Dr. Kuhn was born in Reading, Pa., in 1914. He was a student at Albright College and earned his ph.d. in economics at the University of Pennsylvania's Wharton School. He also taught there, 1938 to 1951, while getting his ph.d.

His experience in industry—worked in the shop and as a set-up man for Standard Pressed Steel Co.

He has been at the University of Cincinnati since 1949, department of economics, but has left there to do some work on a book.

When retiring President Harry Hadley and Secretary-Treasurer Harry Weston were arranging for the program and papers at Cincinnati, it was William Heilig, vice president of The William Powell Co., Cincinnati, who told them about Dr. Kuhn, saying that he had stirred up a lot of interest in his discussions of GAW in the Cincinnati industrial area.

(Any reader wishing to contact Dr. Kuhn, write The Editor, PULP & PAPER, 1791 Howard St., Chicago 26, Ill.)

See Page 64 for remainder of PULP & PAPER's own report on Superintendents Convention in Cincinnati.



**Robertson For Defense Post; James Takes One in Commerce**

**RUEBEN B. ROBERTSON JR.** (left), 47-year-old President of Champion Paper & Fibre Co., was slated to be appointed to the \$20,000-a-year Deputy Defense Secretary post left vacant by Texas Oil Man Robert B. Anderson, an Eisenhower favorite, according to a *Chicago Tribune* dispatch printed just before this issue went to press. Mr. Robertson was an Army Lieutenant Colonel in World War II. If he should accept, this might complicate his scheduled ascendancy to the Presidency of American P & P Assn. next February. Mr. Robertson has indicated he will accept the post.

**ROBERT B. JAMES** (right), Sales Mgr. of American Box Board Co.'s Folding Box Division, and also with sales responsibilities for the company's Grand Rapids, Mich., Mills, is the new Director of the Forest Products Division, Business and Defense Services, U.S. Dept. of Commerce. He is on loan for 6 mos. or longer without compensation. Born in Grand Rapids, Feb. 25, 1913, he is married, has 3 children. He attended U. of Grand Rapids and Pratt School of Business. He joined American Box in 1940, had special assignments in war obtaining Armed Forces contracts and developing waste paper conservation throughout Michigan.

## Where Pulp and Paper Ranks

**No. 2 Industry in energy needed for value added to product.**

**No. 2 Industry in installed generating capacity.**

**No. 3 Industry in total kilowatt hours consumed.**

PULP & PAPER asked Rest R. Baker, industrial application engineer with Westinghouse Corp., to bring up to date an evaluation of the importance of the pulp and paper industry of the United States in the electrical world, which he had first done some years ago. He has graciously complied, and this is his up to date report:

Where pulp and paper ranks in relation to other U.S.A. industries:

**NO. 2 INDUSTRY—in energy required per dollar of value added by manufacturer.** The production of 1 ton of paper adds approximately \$160 to the value of the product and requires approximately 870 kw hrs. under average mill conditions.

**NO. 2 INDUSTRY—in generating capacity installed.** The pulp and paper industry has installed over 3 billion kilowatts of generating capacity repre-

**R. R. BAKER—**Rest Russell Baker is the full name. Industrial Application Engineer with Westinghouse Corp., he has been a specialist in the pulp and paper since 1921. He is a graduate of Univ. of Michigan.



senting 60% of the industry's total demand. This is over twice the national average of installed generating capacity to total demand.

**NO. 3 INDUSTRY—in total kw hrs. consumed.** In operating its 307 pulp and 760 paper mills during 1954, this industry consumed over 24 billion kw hrs.

## More Mills Testing Chemi-Groundwood

Since PULP & PAPER published "The Northern Story," complete illustrated article on the first commercial operation of the chemi-groundwood process at Great Northern Paper Co. (April 1955 issue), a number of mills with hardwood resources available have sent representatives to East Milinocket, Me.

Successful test runs were made by one mill of aspen chemi-groundwood, with a reduced amount of sulfite, for printing paper. Several northern mills contemplate profitable use of chemi-groundwood.



# Earnings of Leaders Ahead of '54 Pace

International, Crown Z, Kimberly-Clark, St. Regis and Scott are now "Big Five" in that order as mergers continue

● Pulp and paper companies, in the third fastest growing industry in America, were heading for new sales records, as shown in first quarter earnings reports.

More mergers—a continuing 1955 trend—already have changed the relative positions of what were listed as top companies in sales in North America in the May issue of PULP & PAPER. Confiscatory inheritance taxes, on one hand, and strengthening of companies by diversifying products and markets, integration and enlarging forest and finance holdings are impelling reasons behind mergers.

International Paper stays at the top No. 1 spot with its all-time sales record of \$683,000,000 in 1954. Its acquisition of Brown Corp. and of a container company in Canada is making it even bigger. Its first quarter sales pace, if kept up through this year, would ring up the biggest sales total in history for any paper firm—over \$760,000,000.

Crown Zellerbach solidified its position as No. 2 company. Merged with Gaylord Container (\$86,542,000 sales last year), its potential is \$390,000,-

000, even if it only maintains their combined earnings of 1954 through this year. CZ directors have voted a 2-for-1 common stock split, also plans to increase cash dividends.

**KIMBERLY-CLARK MOVES UP**—Kimberly-Clark's merger with its best customer, International Cellucotton Products, zooms that company into No. 3 spot. Last year their combined sales were \$322,328,000.

No. 4 now is St. Regis. Even while adding Pollock Paper (\$35,000,000) and General Container (\$23,000,000), it slipped out of third place. Their combined sales last year were \$258,000,000. St. Regis, alone, is running at a pace \$20,000,000 higher.

No. 5 is Scott Paper, earnings of \$228,000,000, counting Hollingsworth & Whitney and Detroit Sulphite divisions.

No. 6 is Container Corp. of America, which added a plastics company, and had 1954 sales of \$186,600,000 without it. It will hit \$200,000,000 this year if it keeps up the first quarter pace.

No. 7 is West Virginia Pulp &

Paper, which, with Hinde & Dauch properties, made \$164,843,000 last year. First quarter figures indicate it is going over \$170,000,000.

**WHAT FIRST QUARTER SHOWS**—Here are first quarter sales, income and net per share figures for 23 selected companies, prepared for PULP & PAPER by Cyrus J. Lawrence & Sons, members New York Stock Exchange. First group are market pulp and timber companies; next are northern integrated pulp and paper mills; next a half dozen firms with far-flung integrated operations in both north and south. The last six companies are primarily in the paperboard field, the first two being regarded as Southern operations primarily (but Gaylord now, of course, is part of Crown Z).

## Half Year Records Smashed

Rayonier, Scott and St. Regis sales for first half of 1955:

Rayonier's profits, \$8,045,515, or \$3.54 per share common. Sales, \$70,347,291, as against \$40,916,666, first half of 1954—reflecting output of new Jesup, Ga., mill and merger with Alaska Pine & Cellulose. Its five U.S. mills sold 292,214 tons of pulp and paper, up over 60,000 from the first half of 1954.

Scott Paper broke all sales records with \$125,825,112, compared to \$113,451,934 in first half of 1954, up 10.9%. For Scott-trademarked paper products only, sales were \$93,770,855, up 13.6%. The 1954 figures included Detroit Sulphite and H & W Co., though they weren't merged with Scott till Sept.-Oct.

St. Regis Paper also broke all its past records, with sales of \$112,474,642, which compares with \$101,365,753 in first half 1954. Gain partly reflects mergers.

## Headed for 29,000,000 Tons!

Never in history has the U.S. paper-paperboard industry made as much as 26.7 million tons, but this year it is likely to near 29,000,000—up 10%—says Ted Tinker, exec. secretary of APPA. This is on basis of 14,704,000 tons in the first half of 1955, one million over the 1951 record for that period.

The Stanford Report has predicted only 32,000,000 by 1960!

## REPRESENTATIVE COMPANIES—SALES AND EARNINGS, 1ST QUARTER (Especially prepared for PULP & PAPER—Similar operations grouped)

	Net Sales (000)	Income Before Taxes (000)	% of Sales	Net Income (000)	Net Per Share
Puget Sound Pulp & Timber Co.	\$ 5,442	\$ 1,390	25.5	\$ 667	\$0.66
Rayonier, Incorporated	34,091	7,397	21.7	3,692	1.61
MacMillan & Bloedel Co., Ltd. (fiscal yr. ends 9/30)-(2nd Qr.)	44,589	8,497	19.1	4,330	0.82
Diamond Match Co.	24,499	2,697	11.0	1,397	1.10
Eastern Corp.	5,807	523	9.0	278	0.75
Glatfelter (P.N.) Co.	4,572	1,241	27.1	558	1.56
Great Northern Paper Co.	11,350	1,929	17.0	1,009	0.90
Hammermill Paper Co.	8,267	998	12.1	515	0.62
Kalamazoo Vegetable Parchment Co. (fiscal yr. ends 9/30)-(2nd Qr.)	11,692	1,125	9.6	577	0.70
Marathon Corp. (fiscal yr. ends 10/31)-(2nd Qr.)	32,603	5,187	15.9	2,253	0.61
Oxford Paper Co.	14,098	1,755	12.4	824	0.92
International Paper Co.	191,475	36,876	19.3	18,284	1.75
Woods Corp.	31,133	3,773	12.1	1,781	1.37
Riegel Paper Co.	12,581	696	5.5	324	0.58
Scott Paper Co.	63,422	11,781	18.6	5,601	0.70
St. Regis Paper Co.	55,050	8,335	15.1	4,130	0.72
West Virginia Pulp & Paper Co. (fiscal yr. ends 10/31)-(2nd Qr.)	42,613	6,449	15.1	3,299	0.64
Gaylord Container Corp.	22,889	3,699	16.2	1,829	0.68
Union Bag & Paper Co.	28,892	7,117	24.6	3,360	1.90
Container Corp. of America	49,322	7,356	14.9	3,531	1.28
Gair (Robert) Co., Inc.	20,785	2,243	10.5	1,377	0.60
National Container Corp.	22,038	3,630	16.5	1,626	0.51
Sutherland Paper Co.	13,558	1,549	11.4	743	0.74

The sales and earnings for the First Quarter of 1955 were especially prepared for PULP & PAPER by Cyrus J. Lawrence & Sons, members New York Stock Exchange, from statistical services and published reports. While the figures are believed to be correct, no guaranty is given as to their accuracy.



**NEW WORLD RECORDS ARE BEING ESTABLISHED**—New world records in pulp and paper production and commerce will be established in 1955, says PULP & PAPER's WORLD REVIEW NUMBER, 1955 issue, which is just off the press.

Over 70 correspondents from nearly 50 countries contributed on-the-spot direct reports to this issue, which has been called the "Encyclopedia Britannica" of this industry. There is a section on every nation.

It reveals that total world paper production in 1954 was 57,426,403 tons; total pulp production was 46,179,590 tons. The Free World made 92% of each.

The Free World made 52,945,103 tons of paper as against only 4,481,300 tons in the Communist World, despite the fact that only two-thirds of the world's total population of 2,714,978,000 is in the Free nations.

The average man of the world today uses 42.3 lbs. of paper in a year. But a subject of the Red World uses only 10.4 lbs. In the Free World, the average citizen uses 58.2 lbs.

Leading exporters of woodpulp are: Sweden, Canada, Finland, Norway, U.S.A., Austria, West Germany, New Zealand and Portugal—in that order. A world map shows the flow of pulp—amounts shipped to each country from leading producers.

What is happening in pulp and paper as a result of the economic boom in Europe and the new "awakening" of Latin American nations is told in about a 250-page volume.

Leading makers of paper are U.S.A., Canada, Britain, West Germany, Russia, Japan, France—in that order. Brazil is 17th; Argentina is 23rd; Mexico is 24th. And a surprise—India climbs to 25th.

In pulp production, the leaders, in this order, are: U.S.A., Canada, Sweden, Finland, Russia, Japan, West Germany, Norway, France, East Germany. In 15th place is Brazil; in 23rd is Mexico; in 25th is Argentina.

A multitude of pictures from every land, reports on new mills, new trends, statistics on every country—the volume is a veritable "treasure-house" of pulp and paper facts from around the world.

(Subscription orders sent to PULP & PAPER, 121 Second St., San Francisco, can include the Review Number for only an additional \$1, if the writer so specifies. In all Pan American Union nations, subscriptions are—for one year, \$3; for 2 years \$5; in other overseas nations—one year, \$4; 2 years, \$7. Add \$1 for the WORLD REVIEW; next year's WORLD REVIEW will be included at no added cost.)

Subscriptions to PULP & PAPER may be paid in pound sterling to: Harold P. DeLooze, Ltd., 8 Peter St., Manchester 2, England. Three years, £3.12.6; two years, £2.10.0; one year, £1.9.0.

**BROWN CO. ENLARGES EXPORT STAFF**—Brown Co., Berlin, N. H., producer of woodpulp, paper, and chemical forest products, has expanded its facilities for marketing in Western Europe. Newton L. Nourse, vice president in charge of sales, said Frederick L. Graham, 146 Ave. des Champs-Elysees, Paris, will be direct representative for all Continental Europe, and agents will be engaged in various other European cities. N. C. Nelson, manager of Brown's foreign sales, went abroad to organize the expansion program.

**NEW NAME**—The U.S.A. Government's Foreign Operations Administration, formerly the Mutual Security Ad-

**NEUVOS RECORDS MUNDIALES:** En 1955 se establecerán nuevas normas mundiales de producción de pulpa y papel, según declara la Revista Anual de la Industria, edición 1955, lanzada ultimamente por la revista *Pulp & Paper*.

Más de 70 colaboradores en todas partes del mundo enviaron relaciones y noticias íntimas para formar la notable revista mundial. A cada nación se dedica una sección especial.

Se da a saber que el total de producción mundial de papel llegó a 57.426.403 toneladas, y de pulpa 46.179.590 toneladas. Las naciones del "mundo libre" produjeron el 92% de ambas cantidades. La producción de papel del mundo libre fue 52.945.103 toneladas mientras las naciones comunistas fabricaron 4.481.300, a pesar de que solamente el 66% de los 2.714.978.000 habitantes del mundo se encuentra en las naciones libres.

Por término medio cada habitante del mundo consume 42,3 libras de papel anualmente. En el mundo libre el consumo promedio es a 58,2 lbs; en el mundo rojo 10,4 lbs.

Las principales naciones exportadoras de pulpa son: Suecia, el Canadá, Finlandia, Noruega, los EU, Austria, Alemania Occidental, Nueva Zelandia y Portugal, en el orden indicado.

Las principales naciones fabricantes de papel son los EU, el Canadá, la Gran Bretaña, Alemania Occidental, la Unión Soviética, el Japón y Francia en orden. El Brasil ocupa el puesto 17, Argentina el 23, México el 24 y (lo que causará sorpresa) India el 25.

En producción de pulpa las naciones se alinean así: EU, el Canadá, Suecia, Finlandia, la URSS, el Japón, Alemania Occidental, Noruega, Francia, Alemania Oriental. Brasil lleva el número 15, México el 23 y Argentina el 25.

La Revista Mundial contiene gran cantidad de fotos de todo el mundo, informes de nuevas fabricas, noticias y cifras de todos países, en fin un mundo de informacion del mundo entero.

(Ejemplares de la Revista Mundial se consiguen egregando la suma de 1 dls. al abono de subscripción de la revista *Pulp & Paper*, dirigiéndose a 121 Second Street, San Francisco, California, EUA. El precio de subscripción en todos los países Pan-americanos es a 3 dls. por un año, 5 dls. por dos. En otras naciones de ultramar, un año a 4 dls., dos años a 7 dls. Agreguese 1 dls. por la Revista Mundial. La mundial correspondiente al año 1956 se enviará gratis a los subscriptores.)

Abonos de subscripción a *Pulp & Paper* pueden pagarse en libras esterlinas a la casa Harold P. deLooze, Ltd., 8 Peter Street, Manchester, Inglaterra. Tres años, £3.12.6; dos años, £2.10.0; un año, £1.9.0.

**AUMENTO DE FACILIDADES:** La Brown Company de Berlin, New Hampshire, EUA, fabricante de productos químicos, ha aumentado sus facilidades para exportación. Sr. Newton L. Nourse, vicepresidente, declaró que Sr. Frederick L. Graham, 146 Avenue des Champs-Elysees, Paris, se encarga de ventas en toda Europa, y habrán agentes en otras ciudades europeas. Sr. N. C. Nelson, gerente de ventas en el extranjero, hizo un viaje personal para efectuar los debidos arreglos.

**NOMBRE NUEVO:** El 1o de julio dejó de existir la Dirección de Operaciones en el Extranjero (FOA) del gobierno norteamericano, que anteriormente se denominaba la Dirección de Seguridad Mutua (MSA) y aún antes la Dirección de Coperación Económica (Plan Marshall).



## What's New in the World of Woodpulp

ministration and before that, the Economic Cooperation Administration (Marshall Plan) went out of existence July 1. All its functions have been transferred to the State Department in Washington, and the new agency is the International Cooperation Administration.

**ATOMIC-POWERED PULP MILL**—First woodpulp mill to be powered by atomic energy is being built at Halden in Southern Norway by United Sawmills Co. A \$3,500,000 reactor will provide 20,000 horsepower at the startup.

**NEW RESEARCH IN MADRID**—Interesting new research work in making pulp and paper from African cedar and uncommon pulpwoods, as well as pine and eucalyptus, and from "residues" is reported going on in a new government Forestry Institute of Research and Experiments in Madrid.

PULP & PAPER asked for information on the Institute and its aims and methods from sources in Madrid. A reply disclosed that the Institute was dedicated only last year in ceremonies attended by General Francisco Franco, chief of state; the Minister of Agriculture, Rafael Cavestany, and many other notables. It occupies a huge chateau-like structure, the middle portion in three floors and with two extensive wings of two stories, and a "basement" partially above ground level. Many exotic species of trees are grown on grounds that cover some 60 acres (24 hectares). A magnificent park and experimental arboretum covers 35 acres. The Institute itself covers about 4115 meters square.

A Cellulose Section is an important part of the Institute. It is equipped with an experimental paper machine, two digesters, and other pulp and paper stock preparation equipment.

Pollution of waterways is a major department of study. Causes of soil erosion, conservation of forests and reforestation, forest genetics, an experimental plant for processing resins and other industrial derivatives—these are among some of the divisions of study.

Garcia Najera is the engineer in charge.



**Stock Preparation Equipment in the new Madrid Forestry Institute**

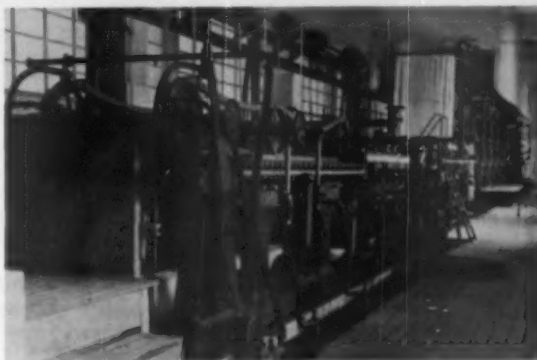
In background is the old type of "Gang Pulper"—big stone wheels that shred waste paper for papermaking and facilitate the separating of metal or foreign material. These may be German make, or home made in Spain.

Equipos de fabricar papel en el nuevo Instituto Forestal, Madrid. Al fondo se ve una machacadora a base de dos planchas de piedra que muelen papel de desecho, al mismo tiempo facilitando la separación de particulos de metal en la masa.

## Noticias Mundiales de la Industria Pulpera

Las funciones de la difunta agencia se realizan ahora por la Dirección de Cooperación Internacional (International Cooperation Administration) dependencia de la Secretaría de Relaciones Exteriores.

**FUERZA ATOMICA** se empleará por primera vez en la industria, en una fábrica de pulpa ahora en construcción en Halden, Noruega, de parte de la United Sawmills Co. Un reactor que costará 3.500.000 dls. suministrará 20.000 caballos de fuerza al principio.



**Experimental Paper Machine in Madrid**

In the new Forestry Institute, this machine is reported making a satisfactory paper from African cedar. Word reached London of "new methods of making paper from what they called 'industrial residues.'"

Máquina experimental para fabricar papel en el nuevo Instituto Forestal Madrid. Según noticias publicadas en Londres, aquí se está fabricando papel de cedro africano y se están estudiando métodos nuevos de fabricación.

**NUOVO CENTRO CIENTIFICO EN ESPAÑA**—Entre muchos y diversos estudios sobre las ciencias e industrias forestales, se están llevando adelante en el nuevo Instituto Forestal de Investigaciones y Experiencias, Madrid, investigaciones sobre la fabricación de papel del cedro africano, eucalipto, pinos y otras maderas.

La nueva sede del instituto, localizado en el monte de El Pardo, a la orilla del río Manzanares, se inauguró en noviembre de 1954, asistiendo a las ceremonias el Sr. Jefe del Estado, Generalísimo Francisco Franco, el Ministro de Agricultura, Sr. Rafael Cavestany, y muchos otros funcionarios.

El nuevo edificio en forma de U ocupa 4.115 metros cuadrados con su sección central de tres pisos y laterales de dos pisos y sótano. En los montes experimentales que abarcan 9 hectáreas se cultivan muchas especies forestales, indígenas y exóticas. Además hay un parque o arboreto de 14 hectáreas.

La Sección de Celulosa es una de las importantes partes del nuevo Instituto. Entre los equipos se encuentran lejadoras y máquinas de fabricar papel y seda artificial, con laboratorios para ensayos y análisis.

El instituto también se dedica a otros ramos de estudios forestales inclusive hidráulica torrencial, biología de aguas, conservación, repoblación, tratamiento de maderas, etc. El establecimiento queda a cargo del Sr. Ing. García Najera.

### EDITORS NOTE—

Worldwide commerce in woodpulp is setting new patterns as well as new records. As a service to many subscribers to PULP & PAPER in other countries, we are now publishing this news in both Spanish and English.

Hoy día en el comercio mundial de pulpa se están realizando grandes cambios, al mismo tiempo que dicho comercio aumenta notablemente. Con el anhelo de mejor servir a nuestros muchos lectores, mensualmente publicamos nuestras noticias mundiales en español e inglés.



# Will Most Future Paper Be Coated?\*

A report on what consumers want and what they may get;  
battle for advertising dollars spurs technical progress

● Eye appeal and more incentive for impulse buying in advertising and packaging is the greatest driving force behind improvements of coated paper and paperboard—for the printed page and the glamor advertisement in magazines, for packages in which all kinds of goods are now offered to customers.

A dramatic case history is that of new glamorized match boxes and match books of Ohio Match Co. The match industry was on the decline, because of new pilot equipped stoves, increased use of electric stoves, and other modern conveniences, such as lighters. Ohio Match consulted an advertising agency, made a complete survey of potentials, of the changes it planned, directly with the consumer, running a continuing audit in cross sections throughout the country. It decided on its new colorful varnish coated boxes after a consensus directly from consumers. The result: Ohio Match had to buy new roto-gravure presses and other new equipment. It started marketing the new boxes without publicity in certain sections, then backed it up with publicity and advertising.

Then it started a vigorous national advertising campaign—direct to the consumer. Sales, which had been declining each year, suddenly are increasing. In fact, Ohio Match has picked up all deficits which occurred over several past years, and the volume is above the record sales of 10 years ago.

What does this case history show? It shows that modernizing of any manufacturers' package can actually make his product so beautiful and so eye-appealing to the consumer that the product becomes an impulse item.

This is one of the most important things that any manufacturer in America has to consider today, in what records show is the most competitive marketing and selling era ever known to mankind.

**DAY COMING WHEN MOST PAPER WILL BE COATED?**—Considering what is happening today in the publishing world, the advertising world, and the supermarkets, it is

\* Based upon a survey presented at the recent TAPPI National Coating Conference in Cleveland, O., by Albert W. Wilson, editor, PULP & PAPER.

very possible that the day is coming when most paper and paperboard—even newsprint—may be coated by some means or other. How long it might take for that day to come depends on many things.

Only about 20% of boxboard is now coated. With programs already underway that showed rise to 75% or more within just a few years.

Observers believe the industry is on the threshold of an expansion of paper coating and paperboard coating that might be as important and as widespread as the recent "express train" trend toward higher brightness pulps.

**A memo to coating printing paper mills:  
Says Printer's Ink—"Larger national advertisers are paying marked attention to full color advertising in all media. Magazine color will be widely used."**

**COATING OF OFFSET PAPER INCREASES**—A greatly increased amount of coating of offset papers recently has been made possible through research and development of binding materials and other chemicals. Nearly everyone making coated offset papers uses latex for this purpose, with starch, casein or other protein adhesives. Melamine and urea resins are now used as a waterproofing agent and to improve surface texture and wet rub resistance, particularly for offset printing papers. Wax emulsions are used to give gloss and greater ink coverage.

A curl problem was the obstacle to coating of offset papers. Now that problem is licked.

**COATED NEWSPRINT MAY BE REQUIRED FOR BETTER ADS**—

Newspapers are under great pressure from magazines and television to do a better job of printing color advertisements. Page after page of multi-color printing makes up a substantial part of Life's \$114,000,000 a year revenue from advertising. Newspapers are being put on the spot. Advertisers demand realism, and what is now being called the third dimension effect in printing.

Several newspapers have used an experimental coated newsprint. The Bronxville, N. Y., News regularly publishes its newspaper on Oxford coated paper. The Chicago Tribune recog-

nized this need for more realism and invested in research to develop a coated newsprint. At its Ontario Paper Co., it experimented with roto-gravure paper, seeking to put clay on the surface of the sheet instead of in the furnish. Sulfite base, Northern wood species newsprint is said to be an excellent base for coating.

One major man-made barrier to the coating of newsprint is tariff laws. Imported U. S. newsprint cannot have more than a very light, impractical coating on either side of the sheet. But tariff obstacles to coated newsprint may prove only a temporary interference. Newspapers of the United

States were strong enough to force the end to a tariff on ordinary newsprint, 40 years ago, while continuing tariffs on every other grade of paper. When, and if, the pressure is on strong enough, American newspapers may want and need a coated newsprint to hold their advertisers and readers. The President has the tariff removal powers that he asked for, in whatever categories his advisors feel they should be removed or reduced. Newspapers are among his most forceful advisors.

**MAGAZINES VS. TV FOR GLAMOR ADVERTISING**—Is it possible to substantially increase the use of coated book or magazine paper?

The sales manager of one of the biggest producers of letterpress machine-coated magazine paper says this market may have almost reached a peak, unless something happens to make it possible for more magazines to use mineral surface papers. Lots of them can't afford it, he says.

National advertising on television has already caught up with national advertising in magazines and has virtually caught up with newspapers. A few years ago this new consumer of advertising dollars—TV—didn't even exist. National advertising on television totaled about \$635,000,000 last year as compared to \$633,000,000 in magazines, and \$649,000,000 in newspapers. Radio was a poor fourth



—only \$267,000,000. But the magazines using a mineral surface paper had only about \$400,000,000 in national advertising, less than 20% of the total. Already television is 50% ahead of the coated paper magazines.

Total advertising revenue includes national plus local advertising. The figures on total advertising in 1954 were as follows: Newspapers, \$2,670,000,000; magazines, \$1,300,000,000; television, \$809,000,000; and radio, \$608,000,000.

All business magazines carried \$405,000,000 in advertising last year, about 5 million more than all weekly magazines of general circulation and about half as much as television.

Advertising is, of course, one of the major influences on the potentials of coated printing papers.

**"THIRD DIMENSION" COLOR PRINTING**—Publishers and advertisers say they require coatings that will greatly enhance the third dimensional feeling of color printing. The publishing field recognizes that this work must be carried out hand in hand with the development of new techniques in printing plate and ink manufacturing.

Another place where publishers foresee great possibilities is the relationship between coating and ink drying speeds. It is possible that new coatings techniques will have a dramatic and revolutionary effect on the types of inks which are used and the speed with which they can be dried.

It also is expected that machine coating methods will be improved to eliminate the "orange peel" or pattern that roll coaters presently impart to sheets to some degree.

There is a strong trend toward lower basis weight paper for magazine paper coated stock. Economic reasons and the U. S. Post Office are forcing this.

**SOME CRITICISM FROM PRINTERS**—Chicago is the greatest printing and publishing center in the world—with 3 biggest printing houses in America. In Chicago, 830 different publications are printed. Here is a sampling of some Chicago printers' ideas of the future needs in coated paper.

A printer using high priced paper says 20% of his lost time is due to paper troubles. He suggests better packaging and sealing of the quality coated paper before shipping from the paper mill.

Another suggestion is that paper mills making coated paper ought to station one of their technical men in the printing plant of a big customer, or customers, for a long period of time to see what the printers' prob-



**Coating Experts in 3 Nations—U.S.A., Canada, Holland**

Welcoming HAL GARDNER (left), Technical Supt., Champion Paper & Fibre Co., Houston, Tex., to the recent Coating Meeting in Cleveland—to his left: MRS. DICK TRELFA, MR. TRELFA, Tech. Director, Watervliet Paper Co. and Chairman of TAPPI Coating Council; HANS ALLO, Chemical Supt., Van Gelder Zonen N.V., biggest paper company in The Netherlands with 5 mills and 20 machines, making 50% of total Dutch output; and KEN LATIMER, Time, Inc., laboratories, Springdale, Conn., where research is carried on to improve paper, coating and printing techniques. Mr. Gardner has had a long career in coating with Crown Zellerbach and Provincial (Canada) mills and in Wisconsin. He hails from Milwaukee.

Watervliet Paper is installing a new 60-tons-a-day neutral sulfite pulp mill and bleach plant, using mostly long-scoured aspen, right outside its mill doors in Michigan. This will give high Mullen and tensile strength in short fibers furnish for highest quality coated printing papers.

lems are, and to see what can be done to improve the paper and service.

One high quality offset printing house in Chicago says it is only running at 55 to 60% of capacity—what it could run if its paper troubles were solved. This is a company with a \$500,000 inventory of coated papers.

Another printer says a lot of small printers, now reportedly going broke, could stay in business and increase general paper consumption, if their high rate of wastage could be eliminated, stabilizing and improving the printing industry, to the ultimate advantage of papermakers.

Television and color on television shows a roast beef that really looks like one. So now, many advertising agencies are requiring special insert paper for 4-color ads, to keep up with TV. They say the quality of their coated paper stock is improving, especially for offset. But the quantity of this quality paper is getting critical.

A piece of waste in a skid of paper can wreck printing equipment, causing repairs in hundreds of dollars, and wasting time of printers paid \$3.50 an hour. One printer says a certain coated paper now on the market contains a chemical which will actually etch a printing plate.

All printing paper variations, generally tolerated a few years ago, are now very critical in machine coated papers because of lower weight papers used and higher press speeds.

**ELECTRONICS MAY REVOLUTIONIZE PRINTING AND PAPER-MAKING**—What will be done with

electronics?

Standard Register Co. in Dayton, O., has sold the Air Force a new photonic reproducer, called a "smoke printer." A microfilm image projected on glass with a metallic coating forms an invisible pattern of electric charges. In front of the coating is paper. An electrified mist of pigment particles settles on the paper in the pattern of the image. It is fast and simple, prints on any kind of paper—photosensitized paper is not required. Similar electronic processes may deposit any kind of coating on paper. The same principle might improve paper stability by controlling arrangements of fibers.

A New York scientist is reported to have formed images, printed pictures and text, by passing ink particles through an electrified screen. He also has the idea of forming a sheet of paper by putting an electrical charge upon fibers and depositing them on a continuous wire or web in any formation desired. One of the highlights of the TAPPI Coating Conference in Cleveland convention was announcement of a successful new electrostatic process for coating paper, developed for Bergstrom Paper Co.

New coating processes are continually being developed. A new Frozen Flow process, recently patented, reveals a story of progress in its name. Clay, pigments, starch, casein proteins, dyes, latex, resins, titanium, talc, and calcium carbonate technicians are busy refining and improving their products.

New clays are more pure, more uniform, of finer fractions. Use of



Georgia clays has increased in just 20 years by over ten times to close to 600,000 tons a year. Some English clays, too, for specialties are coming back strong. New ultra-fine particle size talcs are coming from Nevada and California, used for high brightness, non-abrasiveness and opacity.

Now there is over 100,000 tons of calcium carbonate used annually in coating and its use is increasing. Latex is in demand for offset papers. Melamine and urea resins impart water resistance and wet rub resistance and a liquifier reduces and stabilizes the viscosity of coating colors.

Starches are being modified for better pigment-to-pigment and pigment-to-paper bonding. The future may bring new tailor-made starches for specific end uses of paper. There is more use of new plasticizers and of metallic type additives. A new foam-free casein is now used for coating of paper lithographic plates because of its pit-free qualities. More proteins are used.

Uses of titanium pigments have increased for brightness, opacity and hiding power—and they now make possible a cheap groundwood or unbleached pulp base stock for coated publishing paper and lightweight coatings of brown kraft stocks. The industry people are on the alert, as demand is rising for more colored coatings.

**WHAT FUTURE HOLDS FOR SUPERMARKETS**—This August will be the 25th anniversary of the supermarket and self-service stores, powerful forces in coated paperboard growth. A supermarket specialist says packaging that is pleasing to the eye is just as important to their operations as a penny differential in the price of a can of beans.

A package must have advertising display, and must be colorful. No longer can it just be a box with dull and mysterious stenciled marks. One firm in Minneapolis which operates throughout the west has introduced the first 4-color fresh fruit cases. New and improved waxed papers also are now winning back a market lost temporarily to cellophane in packaging of frozen foods.

The new supermarkets, according to one authority, are going to have beautifully landscaped parking areas, and spacious areas providing seats and TV lounges for waiting members of the family. Color will be everywhere. But the glamorous self-selling package is going to be the key to it all.

**WHAT'S NEEDED—TEAMWORK**—To hasten the day when almost all



**From Mills and Suppliers, to Learn about Coating**

From 13 states and Canada, came these 20 mill men and supply company staff men to take second summer course at Western Michigan College on coated papermaking: **Front row, l to r:** WM. E. WELLIVER, Jr., N.Y. & Penn. Lock Haven, Pa.; WENDALL E. BRYAN, Mead, Kingsport, Tenn.; HUBERT D. FOSTER, Champion, Pasadena, Tex.; MALCOLM C. WYATT, Howard Smith Mills, Cornwall, Ont.; ROBERT N. ZABE, instructor; GEORGE BOOTH, Dilts Works, Fulton, N.Y.; PAUL WABER, MacSimBar Paper, Otsego, Mich.

**Second row:** PAUL HENRY, Crown Z, West Linn, Ore.; MICHAEL H. OBER, Camp Mfg., Franklin, Va.; LAWRENCE BROWN, St. Regis, Kalamazoo, Mich.; ANTHONY POWLOSKI, Kalamazoo Paper, Kalamazoo; J. E. BOYLE, Hubinger Co., Keokuk, Ia.; LOGAN W. MATHER, Gardner Board, Middletown, O.

**Third row:** Miss CAROLA TRITTIN, instructor; ROBERT MAY, Beveridge Paper, Indianapolis; HENRY SMAINE, Glatfelter Co., Spring Grove, Pa.; GERALD HALE, Minerals & Chemicals, Metuchen, N.J.; J. BAUER, Hubinger Co., Keokuk, Ia.

**Fourth row:** S. C. SLIFKIN, Products Research, Milwaukee; DALE LEEDY, lab technician; JAMES L. BAKER, Albemarle Paper, Richmond, Va.; KARL RYAN, Blandin Paper, Grand Rapids, Mich.; PAUL SHIRLEY, Penick & Ford, Cedar Rapids, Ia. Inset (top right), Dr. AL NADELMAN, Head of Paper Technology Dept.

paper will be coated will require closer teamwork and cooperation than exists today among printers, engravers, manufacturers of printing equipment, ink makers, coating machinery manufacturers, suppliers of chemicals and additives, and—not the least—paper-makers, say observers.

One leading technician in the field explained it this way: "You cannot go very far, very efficiently, on 1910 highways with 1910 gasoline even if you do have a 1955 automobile with power steering and power brakes. And by the same token a 1910 automobile won't make any records for itself on the most modern highways ever with 1955 gasoline and oil."

Time, Inc., which buys over 40 million dollars worth of printing papers in a year, has demonstrated its belief in this basic truth. It spends between one and two million dollars a year at its laboratories in Springdale, Conn., seeking to improve everything contributing to better publishing. It cooperated with two paper companies and a chemical company to develop a new lightweight coated paper as good in every way as a heavier sheet, thus offsetting rising postal rates and higher printing costs, and incidentally, saving woodpulp. This 40-lb. coated paper may save Time-Life close to one million dollars a year.

### **Why Mead Corp. Figures Big In Lives of 2 Supts. Officers—Both born in Ohio**

Two of the five vice presidents of the Superintendents Association were born in Southern Ohio, both graduated from the University of Cincinnati and both went South for their paper-making careers.

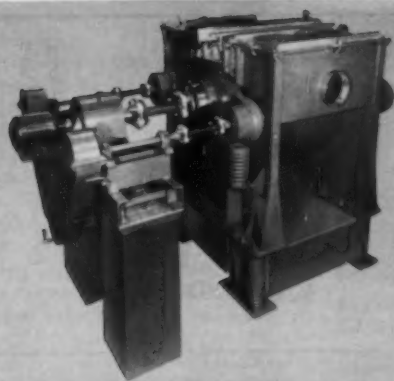
No. 3 V.P., Howard E. Wehr is U. of C. class of '27. No. 5 V.P., Tom Shelley Coldewey is U. of C. class of '37. Mr. Wehr was born Aug. 16, 1903 at Hamilton; Mr. Coldewey, in Cincinnati, just 23 miles away, but Nov. 27, 1912.

Mr. Wehr first worked in Champion's Hamilton mill in 1922; then in 1928 started the rounds of Mead chestnut board mills in the Border South, and is now mgr. at Harriman, Tenn.

Mead Corp. figures big in Tom Coldewey's life.

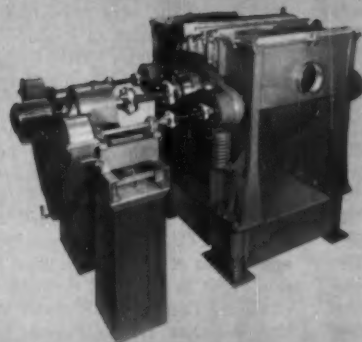
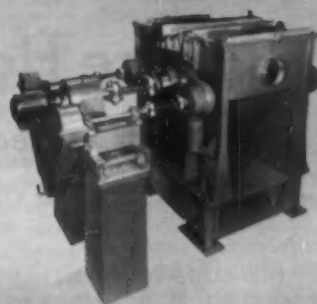
"When I saw a Mead mill running full during the depression, while many other industries' doors were locked, I decided this was the industry for me," he told PULP & PAPER. He joined St. Joe Paper in Florida in 1937 as engineer, is now its vice president of operations.





A single Bird Vibrotor Screen like this produces the equivalent of 55 to 60 flat screen plates. Whether on bleached or unbleached pulps it produces a quality of stock that equals or exceeds that of other types of screens.

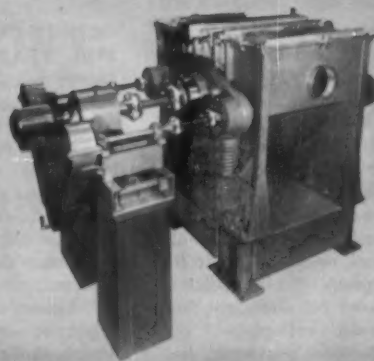
This Bird Vibrotor Screen handles unbleached kraft with a permanganate number of 28, through .012" cut, slotted plates at consistencies as high as 1.7%.



This Bird Vibrotor Screen, used as a final screen preceded by primary screens with 125" perforate plates, handles 80 tons of coarse kraft or 90 tons of mixed pine and short fibred stock, using .012" screen plates.

This Bird Vibrotor Screen handles 100 to 140 tons of deink stock per day at consistencies ranging from 1.1 to 2%, using .012" cut plates — the equivalent of sixteen flat screens in the floor area of a single flat screen.

With .010" cut plates, production is 80 to 110 tons; with .008" plates 55 to 62 tons, the amount depending on the consistency.



## BIRD MACHINE COMPANY

SOUTH WALPOLE • MASSACHUSETTS

REGIONAL OFFICES: EVANSTON, ILLINOIS • PORTLAND, OREGON • DECATUR (Atlanta), GEORGIA



### Olin-Mathieson Acquires Its Second Pulp and Paper Mill

This map shows WEST MONROE, LA., where Brown Paper Mill is located. The boxed "X" just above it is site which had been chosen for Olin pulp mill, now discarded. At HUTTIG is Olin-Mathieson's biggest and best sawmill, where chips will be made. Its Forest Products Division headquarters is SHREVEPORT, site of another sawmill. Olin-Mathieson now has nearly 1,000,000 acres of timberland in North La., South Ark., and East Tex. International Paper Co. has mills at BASTROP, CAMDEN and SPRING HILL. Crossett Paper Mills and its diversified forest industries are at CROSSETT.



## What's Future Hold for Olin-Mathieson?

Now, with its second pulp and paper mill, plus nearly 1,000,000 acres of Southwest timber, much may happen.

● Multi-faceted Olin-Mathieson Corp. has taken possession of its second pulp and paper mill in the South, by the same stroke more than doubling its timberlands in the Southwest (to nearly 1,000,000 acres), and holding forth a silent promise of expansion and upgrading of cellulose production in that area. Its potential for all kinds of forest products—even wood-base chemicals, especially in view of its special interest in chemicals—is vastly enhanced and stimulated.

PULP & PAPER, in its June issue, off the presses before the first of that month, had exclusively reported that Olin-Mathieson's purchase of Brown Paper Mill Co. Inc. was nearing consummation.

But the 550-tons-a-day unbleached kraft pulp, paper and board mill at West Monroe, La., is quite a different kind of property than Ecusta Paper Corp., on the lee side of the "Great Smokies," which Olin acquired a few years ago. The saying was that Olin wanted that flax-base cigaret paper mill, created by the late Harry Straus with French "know-how" and French-trained personnel, mostly as a site for the cellophane plant Olin immediately built there. Wood cellulose, not flax, was required for cellophane, but Ecusta's cellulose-wise personnel, fine mountain water, high grade mill town facilities, etc., were assets which Olin wanted.

About two years ago the Olin organization began planning for a big dissolving woodpulp mill in the Southwest. Its continuing interest in puri-

fied high alpha cellulose goes back to its nitrocellulose requirements for Western ammunition and for Federal Cartridge Co., one of many Olin subsidiaries.

When it acquired the rights to the Dupont cellophane process, it became a buyer of dissolving pulp for its cellophane plants, the latest one being in Olin, Ind. Another one had been projected for Red Bluff, Calif., but that's dormant now. Besides, there is the new requirement of woodpulp for the bigger and better filters that "cancer-conscious" cigaret smokers now demand. In quantity, cartridges, cellophane and cigaret filters don't require so much pulp, but it must be quality pulp and that costs.

**OLIN IN CELLULOSE RESEARCH FOR YEARS**—It is not generally known that for over 20 years Olin has had its own cellulose laboratory at Alton, Ill. Here a considerable staff of Ph.D.'s and other experts in cellulose chemistry have been quietly at work, through all the years that Olin has been a fussy buyer of fine pulps. This has convinced a lot of observers that some day Olin would make its own, and even make some to sell.

While on the lookout for a mill site, it bought out one of the three biggest lumber-timber operations in the entire South, Frost Lumber Co., and set up a new Olin Forest Products Division with headquarters in Shreveport, La. A lot of observers envisaged a dissolving pulp mill "tout de suite" when Robert Evans joined Olin and went to Shreveport as manager, where he

still is located. Mr. Evans and Keve Larson, Weyerhaeuser pulp sales manager, had been the two-man team which had the very important World War II assignment of woodpulp allocations, and later Mr. Evans was secretary of Riegel Paper Corp., now a market pulp producer.

With acquisition of Frost, Olin got four sawmills and 435,000 acres of timberland in northern Louisiana, east Texas and south Arkansas. Frost was, and is, the second or third biggest Southern U. S. lumber producer, its annual cut of about 65 million bd. ft., ranking it in a virtual tie with Southern Pine Lumber, and about 20 million less than Dierks Forests Inc., of Kansas City, which has long been toying with the idea of a pulp or paper mill near the Arkansas-Oklahoma line. Olin made tests for well water for a possible pulp mill five miles west of Sterlington, La., and about 20 miles north of the Brown Paper Mill. Olin obtained a certificate of necessity from the U. S. government for building the pulp mill. This has since been returned.

**WHY OLIN BOUGHT BROWN**—These are the reasons that Olin found it advantageous to buy Brown Paper Mill, instead of building its own new mill:

1. A ready-made mill, even though the grades are not what Olin has been interested in. Paper and board business being what it is today, it is regarded as a fine investment; even without considering further investment that would be required if Olin



Mathieson wanted to make higher quality pulps.

2. It adds 465,000 acres of pine-hardwoods lands which fit in neatly with the 435,000 Frost acres in three states. Most of the Brown mill timber is within 75 miles of West Monroe mill, so is a lot of the Frost timber. In fact, 50% of Brown timber is within a 50-mile maximum truck haul.

3. A mill staff headed by Vice Pres. and Gen. Mgr. T. R. Moore, Bruce Brooks, now assistant general manager, and others of long experience, apparently is going to stay put. From early days, the actual operations of this mill were under guidance of the veteran Southern papermaker, Bunn Beasley, general superintendent and Brown company secretary, who presumably is staying on, too, although he may wish to retire soon.

4. Anywhere else, Olin Mathieson would have been faced with building homes and town site facilities. There was nothing at the site near Sterlington. Even though Olin has a fine new sawmill at Huttig, Ark., a pulp mill there would have called for workers' homes.

5. The towns of Monroe and West Monroe, separated by the Ouachita River, offer many advantages, being one of the largest Louisiana population centers—good retail shopping centers, educational facilities and a supply center for the mill operation.

6. There would be no new problems of air or stream pollution. The Monroe public is accustomed to mill odor and knows what it means to their pocketbooks.

7. Barking-chipping facilities are being installed at Huttig, 50 miles away, which can now add to mill supply. Huttig produces 190M bd. ft. of lumber in a 2-shift day.

Anyone familiar with the Olin-Mathieson cellulose and chemical divisions appreciates its continuing interest in high alpha pulp. It is a certainty that this corporation will continue to study the possibilities of up-



#### Executives Who Have Been Close To Olin Cellulose Activities

JOHN M. OLIN (left), new Chairman of Board, of Olin-Mathieson Corp. He was formerly president of Olin, before merger with Mathieson.

ROBERT H. EVANS (right), Manager of Forest Products Division of Olin-Mathieson Corp., with headquarters at Shreveport, La. He was woodpulp allocations official in Washington, D.C., during WW II, was former Secretary of Riegel Paper Corp.

grading its pulp manufacturing at West Monroe, with a long-range view toward increased applications for use of that mill's pulp, presently exclusively used for kraft paper and board.

An interesting sidelight—Brown is not a pulp seller, but it has sold corrugated slittings from its box operations to paper mills.

Others on the Brown Mill staff are David C. Metcalf, Canadian-trained pulp supt.; O. W. Getchell, paper mill supt.; R. W. Alleman, plant engineer; J. E. Whitfield, chief chemist; C. E. Wilds, woods supt.; W. D. Davis, power engineer; J. M. Hilton, chief engineer; S. M. Brown, office manager; R. E. Wilson, finishing room supt.; A. E. Henderson, master mechanic, and F. M. Johnson, sales mgr.

**WHAT BROWN MILL HAS**—This mill has 16 rotary digesters, four 176 in. Fourdrinier machines and one 134-in. Fourdrinier, and a battery of 20 Sutherland refiners. One big machine is new since the war.

It has no bleach plant. Bleaching is required for the pulps that Olin Mathieson uses in other subsidiaries. An interesting side light—one of Olin Mathieson's divisions is the Mathieson Industrial Chemical Division, which has taken a leading role in the trend to chlorine dioxide bleaching in many mills which, as a result, make some of the highest quality pulps on the market. This Mathieson Division advises mills or mill builders on engineering, installation and equipment of  $ClO_2$  bleaching.

**WHERE TIMBER STANDS**—Within Ouachita Parish (Louisiana "county") where the mill is located there are 45,446 acres of Brown company timber. In Union Parish, to the north,

there are 146,035 acres of splendid forest stand.

Louisiana tax commission sources reveal 310,596 acres of timberland in five parishes closely embracing the Brown mill. Arkansas acreage belonging to Olin is hard pressed about Huttig in solid stands, the general area having been held in lumber company hands; not divided extensively for agriculture. Combined acreage with the five parish map area are: Ouachita, 45,446; Union, 146,035; Winn, 88,713; Caldwell, 85,222; Jackson, 33,510. Olin's Arkansas acreage is around 50,000. Elsewhere in Louisiana, largely below Red River, Olin holds 48,866 acres; Brown, 63,475 acres.

#### BROWN COMPANY BACKGROUND

—Brown Paper Mill Co. originated with Lutchter and Moore Lumber Co., which acquired extensive timber holdings (including extensive virgin cypress) in early lumbering development in the Orange, Tex., area. Equipment from an early paper mill venture was brought to Orange and placed into production there. Later, a new mill based on pine pulpwood was built at West Monroe, La., coincident with acquisition of pine land holdings.

Brown Mill Co. was headed by H. Lutchter Brown, San Antonio, Tex., a second generation of the lumber company family. Other officers include his brother, Edgar W. Brown, Jr., Orange, Texas, acting vice president; T. R. Moore, vice president and general manager. The Brown brothers and families owned 88% of all company stock. Old time employees owned 8%. For the Brown families, they got readily saleable stock, presumably, while escaping future confiscatory inheritance taxes.

Thomas S. Nichols, president of Olin-Mathieson, said Brown holdings were bought for an estimated \$90,000,000, about \$50,000,000 in cash plus 725,000 shares.

#### ARE SOUTHERN OPPORTUNITIES NARROWING

—Acquisition by Olin of the Brown Paper Mill Co., close behind that of Hollingsworth & Whitney by Scott, Southern Advance Bag & Paper by Cair, merger of Gaylord Container with Crown-Zellerbach, emphasizes the fact that opportunity for new ventures in the region have become quite narrowed. During the post-war expansion many available Southern sites were taken up but quite a few remained. Aggressive acquisition of forest lands by established mills during the past decade has nullified most of these "potential" sites because major supporting pulpwood sources have been absorbed.



#### Some of Brown Staff

Here are some of top Brown Paper Mill operations executives (sorry, we had no pictures of Gen. Mgr. T. R. Moore and Asst. Gen. Mgr. Bruce Brooks at "presstime"). Left to right: Canadian-trained Pulp Supt. DAVID C. METCALF; Gen. Supt. BUNN BEASLEY, and Paper Supt. O. W. GETCHELL.



# 9 Newsprint Machines Being Built

Others in "talk stage" as newsprint demand rises sharply; much expansion being carried out South, East and West

• Expansion is being pushed so rapidly, one can hardly add up current new projects (\$300,000,000 worth by last month's PULP & PAPER calculations) before new ones are announced.

While getting a second or third wind, let's look at newsprint.

There is a newsprint shortage in midst of a big boom in advertising. Some newsprint mills have completely sold out production for the rest of 1955, and have contracts for years ahead.

There are no less than 9 big newsprint high speed machines coming into production in the next year or two:

1. Great Northern Paper, East Milinocket, Me.
2. Southland Paper Mills, Lufkin, Tex.
3. International Paper, Mobile, Ala.
4. Powell River Co., Powell River, B.C.
5. Crown Zellerbach Canada, Elk Falls, B.C.
6. MacMillan & Bloedel, Port Alberni, B.C.
7. Great Lakes Paper, Fort William, Ont.
8. Bowaters Southern Paper, Calhoun, Tenn.
9. Minnesota & Ontario, Kenora, Ont.

Two of the above—Bowaters and Great Northern—just started machines, now already are adding two more. There are more machines in "talk stage":

1. Coosa River Newsprint, Coosa Pines, Ala.
2. Georgia Pacific Plywood, Juneau, Alaska.
3. Bowaters Southern, Calhoun, Tenn. (would be its No. 4).
4. Proposed new 2-machine mill in Newfoundland.

**SOUTHERN EXPANSION BOOMS IN PAPER AND BOARD**—Southern Advance Division of Robert Gair, Hodge, La., orders a new Beloit 246 in. machine, and Gair's Port Wentworth, Ga. plant is pushing up production 10 to 15%.

Champion Paper & Fibre's plant expenditures this year were near \$11,500,000; last year, \$6,500,000 largely in the South. Chlorine dioxide bleaching now is in both its Carolina and Texas mills.

One big Southeastern company is going to build another mill—the word is pretty well around by now.

St. Joe Paper, with a steady, long term expansion still under steam, is reported to have hit 1,000 tons a day, and shooting for 1,100.

Crossett Paper Mills is pushing their semi-chem pulp mill and board plant for startup by year's end or sooner. The 212-in. Pusey & Jones Fourdrinier machine for newsprint at Southland Mills should start up in April 1956. The Beloit machine at Mobile is scheduled for next summer startup.

Mill building activity at Demopolis, Ala., by Gulf States was due to get going.

Armstrong Cork broke ground July 21 for expansion more than doubling its Macon, Ga., plant. E. A. Worm Jr. is manager.

Talk persists of Northern companies tying in with Southern established companies for added production. Southern activity in general was stimulated when Olin-Mathieson bought Brown Paper Mills. Coosa River directors decide on expansion details in August.

**ALASKA PROJECTS**—George Pacific Plywood will probably be the only bidder, and will buy, 7½ billion bd. ft. of spruce and hemlock in the Juneau, Alaska, area for a pulp mill and possibly newsprint, at an auction sale by the USFS Aug. 17. The Japanese interests hope to buy the Sitka timber area at a sale Nov. 1. Alaska Lumber & Pulp Co., the Tokyo subsidiary, took a 3-year option on a 5 acre site, Blue Lake Farms, near Sitka.

**IN MIDWEST AND EAST**—Kimberly-Clark is replacing No. 5 machine at Kimberly, Wis., with a new high speed coated book paper machine. This is part of a longterm Kimberly expansion. K-C spent nearly \$4,700,000 adding to existing mills in the past year, rebuilding one machine at Munising, two at Niagara Falls.

Champion Paper added cast coating facilities and a new saveall, among other items, at Hamilton, O.

Rhineland Paper completed rebuild of No. 3 machine and additions of an Emerson Claffin refiner, Morden Stock-Maker and two Jones Imperials.

It also is increasing sulfite effluent yeast production.

Chillicothe Paper, Chillicothe, O., is adding a 2-story brick building for more finishing and storage at \$400,000. It is consolidating converting and will make its own skids and cases. Nekoosa Edwards, Port Edwards, Wis., is adding 20% to finishing and storage and shipping facilities. Similar additions are being made by Wisconsin Tissue Mills.

An expansion program that will cost \$8,000,000 is announced by Charmin Paper Mills, Green Bay, including added sulfite pulp. Another machine is contemplated.

Wausau Paper Mills, Brokaw, Wis., added a Ross-Midwest Fulton dryer drainage system for \$20,000, on No. 4 paper machine, increasing and improving production.

Marathon Corp. completed a \$40,000,000 financing program for "present and future requirements."

The Taggart Corp. mill in Watertown, N.Y., will be doubled in size, Abe Cooper, owner, said. Brown Co. broke ground for a \$3,500,000 bleach plant in Berlin, N.H.

U. S. Gypsum Corp. now has a \$95,000,000 five-year expansion program—up \$20,000,000. One project is a multimillion dollar plant in Calhoun County, Ala., to make paper to cover gypsum wallboard.

## LONGVIEW MACHINE ORDERED

—Longview Fibre Co.'s 150/250 tons a day (paper-paperboard respectively) machine addition at Longview, Wash., calls for a Rice Barton wet end, drive and presses, Black-Clawson (Bagley & Sewall) complete dryer section, calendars and reel, and a Beloit winder and unwind stand. Three digesters are being added.

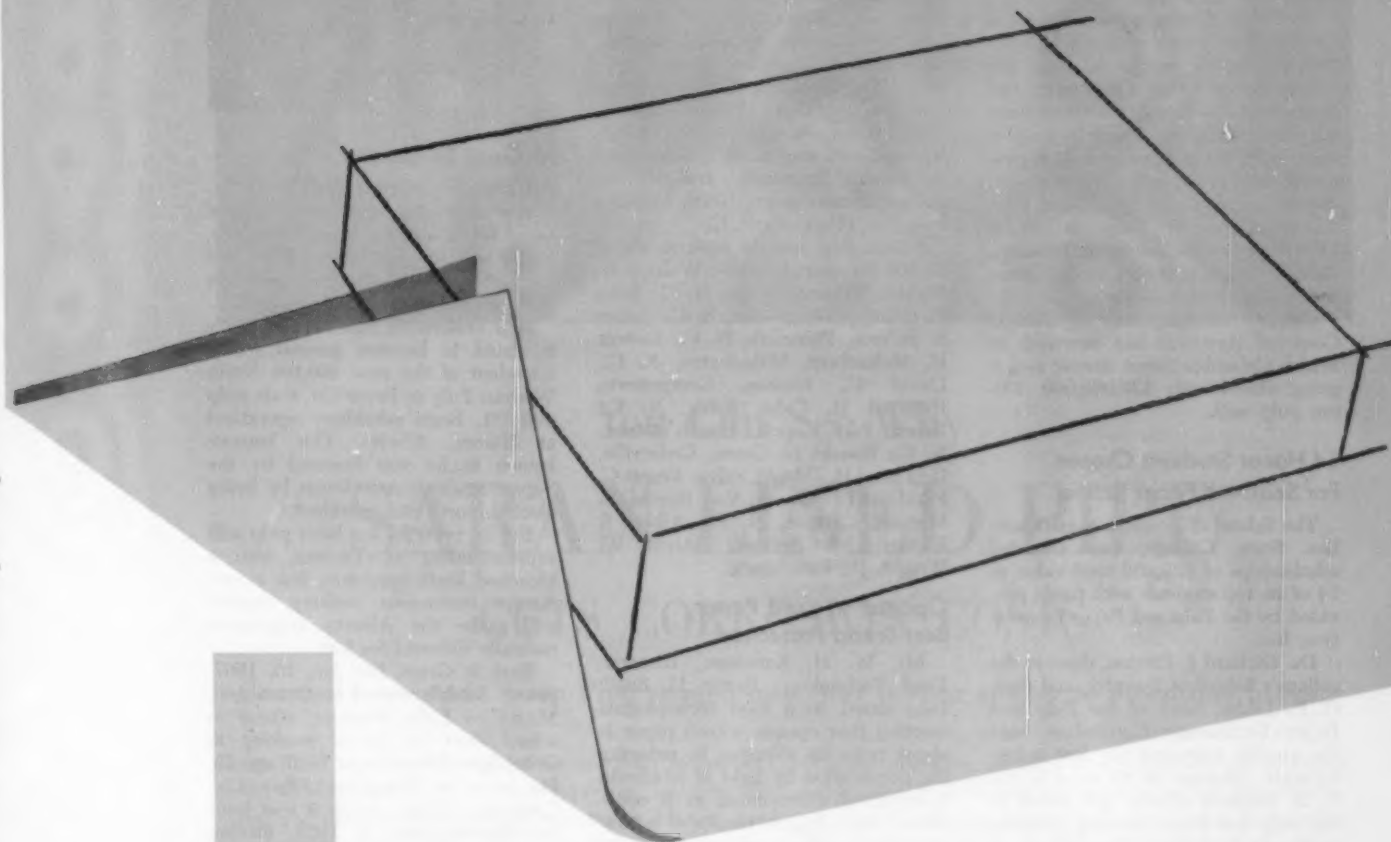
Pres. J. D. Zellerbach of Crown Zellerbach laid it on the line when he said his company will increase its production 50% or more in the next 10 years, and that wasn't counting in the Gaylord merged properties!

Long-Bell Co. may build a kraft mill in Gardiner, Ore. It asked for water.

Simpson Logging bought 1,000,000 bd. ft. of timber from Schafer Lumber in Washington state, and Weyerhaeuser bought 45,000 acres from Simpson. The buyers are both



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.....a light-fast, direct yellowish orange--economical to use--well suited for dyeing the widest possible range of paper types--an excellent base color for tan and russet shades.

With this non-dusting powder you are assured of minimum two-sidedness. Being a stilbene type, it is not bleachable with chlorine and thus holds interest for use on papers fast to ink eradicators.

Supporting every product we offer are the facilities--available to you--of our Technical Service Laboratories. This service is based on years of intensive laboratory research and years of practical mill experience. We offer full cooperation on all your paper coloring and paper matching problems; we invite your inquiry.

Write us for samples and technical literature; call upon our skilled technical service.



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in the pulp and paper industry in a big way.

**IN CANADA**—In Canada, Johns Manville is building a new insulating board mill at North Bay, Ont. of 75,000,000 sq. ft. annual capacity.

A Royal Commission decided a third mill in Newfoundland is justified by timber resources, etc., and recommended that Bowater and Anglo-Newfoundland, who now have big mills, might develop it in cooperation with the government. It is proposed it have two newsprint machines.

Anglo-Canadian Pulp & Paper Mills now has picked Sioux Lookout, Ont., as a new mill site, having abandoned Saskatchewan plans.

Celgar Development (Celanese Corp. of America) has received its British Columbia forest license and is going ahead with \$30,000,000 300-ton pulp mill.

#### 14 Honor Students Chosen For Southern Paper School

The School of Forestry North Carolina State College, has awarded scholarships of \$23,400 total value to 14 of its top students with funds provided by the Pulp and Paper Foundation, Inc.

Dr. Richard J. Preston, dean of the college's School of Forestry, and Prof. C. E. Libby, head of the Pulp and Paper Technology Curriculum, said the awards represent the first industry-wide program of its type in the U. S. Students chosen will enroll in the pulp and paper training program under Prof. Libby. The college is

erecting a \$225,000 Pulp and Paper Laboratory.

Working with college authorities in selecting the scholarship winners was the scholarship committee of the Foundation, headed by J. Ramsey Buchanan, director of public relations, Mead Corp., Sylva, N. C. Other members are Ian Sim, technical director, International Paper Co., Georgetown, S. C.; Dr. C. E. Hartford, vice pres. and general mgr., Riegel Carolina Corp., Acme, N. C.; Dr. H. Y. Charbonnier, asst. general mgr. Union Bag & Paper, Savannah; and E. M. Leavitt, general supt., North Carolina Pulp Co., Plymouth, N. C.

Scholarship winners each receiving \$2,400 for 4 years study: Wallace D. Blalock, Winston-Salem, N. C.; John P. Clardy, Georgetown, S. C.; James S. Jackson, Plymouth, N. C.; George H. McEachern, Wilmington, N. C.; David C. Boume, Georgetown; Herschel H. Cabe, Sylva, N. C.; Ernest Paul Capell, Pisgah Forest, N. C.; Ronald D. Cruea, Cedarville, O.; David H. Dillard, Sylva; Ernest C. Franklin, Lynchburg, Va.; Harold N. Morgan, Candler, N. C.; Albert J. Rhodes, Jr., Brevard; David W. Wright, Jr., Lynchburg.

#### Opaque Waxed Paper Best Bread Protection

Mr. W. H. Kanninen, Director, Food Technology, Foster D. Snell, Inc., stated to a food technologists meeting that opaque waxed paper is about twice as effective in reducing the degradation by light of riboflavin in enriched white bread as is cellophane, according to results of a two-year study by the Snell firm.



#### Pick Prize Southern Students

Scholarship Committee of the School of Forestry, North Carolina State College, who picked 14 prize students for 4-year pulp and paper courses there. Seated, l. to r.: ELMER LEAVITT, Gen. Supt., North Carolina Pulp Co.; IAN SIM, Tech. Director, International Paper, Georgetown, S. C.; RAMSEY BUCHANAN, Director of Public Relations and former Mgr., Mead Corp., Sylva, N. C., Chairman of Committee; and ROBERT ARANOW, Personnel Director, Riegel Carolina Corp., who represented Dr. C. E. HARTFORD, Vice Pres. and Gen. Mgr. of Riegel Carolina. Standing, l. to r.: R. G. HITCHINGS, Committee Secy. and Asst. Prof. of Pulp and Paper, North Carolina State College; Dean RICHARD J. PRESTON of School of Forestry; and Prof. C. E. LIBBY, Director of Pulp and Paper Program, School of Forestry. Dr. H. Y. CHARBONNIER, Asst. Gen. Mgr., Union Bag & Paper, was absent.



**ADOLPH CHARLES McCORRY**—Slated to be General Superintendent of new 400-ton Alberta kraft pulp mill.

#### McCorry To Become Alberta Superintendent

Recent weeks have been eventful for Adolph Charles (Ace) McCorry, native son of Green Bay, Wis., and for 19 years an operations supervisor at St. Regis's Tacoma, Wash., mill.

It is understood that Mr. McCorry is slated to become general superintendent of the new 400-ton North Western Pulp & Paper Co. kraft pulp mill (St. Regis subsidiary operation) at Hinton, Alberta. This became known as he was honored by the Superintendents Association by being elected fourth vice president.

For 11 years he has been pulp mill superintendent at Tacoma, also a bleached kraft operation, but a new Kamyr continuous cooking process will make the Alberta assignment radically different for him.

Born in Green Bay Jan. 10, 1907, young Adolph moved to Ontonagon, Mich., on Lake Superior, where in school days he started working in Ontonagon Fibre Co. in 1926, age 19. He went to Longview Fibre Co., Longview, Wash., when it was built by Wisconsinites, in 1928, staying there until he went to Tacoma as tour foreman in 1936, later advancing to asst. supt. and supt.

While at Longview he married his Ontonagon sweetheart, Cora, from Bruce Crossing, Mich.

When he becomes president of the Supts. Assn., he will choose his 1960 convention site. Some friends are suggesting Jasper National Park or Banff, famed Alberta resorts near "his" new mill. It is only about 50 miles east of Jasper's entrance. But Portland, Ore., where the "Supers" had the biggest national of their history in 1951, has "an inside lane."

#### Paper Replaces Aluminum!

Douglas Aircraft says its paper honeycomb core material has a higher strength-weight ratio than any other existing material. It is made from kraft paper impregnated with phenolic resin. It has only a tenth the weight of aluminum and can be worked like wood and used at temperatures from 65 to 250 degrees Fahrenheit.





## You Can See Why SARAN LINED PIPE CUTS CORROSION COSTS

Corrosion resistant Saran Pipe swaged into steel is your answer to downtime losses.

Saran lined pipe, fittings and valves are built to convey acids, alkalies and other corrosive liquids at low over-all costs. The durable inner lining eliminates shutdowns due to corrosion and forms snug, tight-fitting joints that prevent leakage.

Saran lined pipes, fittings, and valves are easily and inexpensively installed. They are cut and threaded in the field with any standard pipe fitter's tools. Because of saran lined pipe's rigidity, even long spans require a minimum of support.

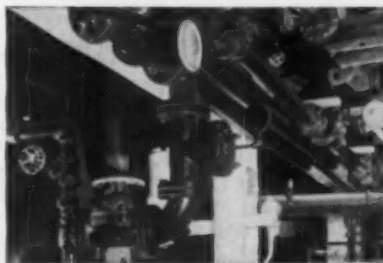
If your operation requires the conveying of corrosive liquids, and if downtime losses are troubling you, investigate saran lined pipe, fittings, and valves today. For further information, contact the Saran Lined Pipe Company, 2415 Burdette Avenue, Ferndale 20, Mich. Dept. 526E-2

**RELATED SARAN PRODUCTS**—Saran rubber tank lining • Saran rubber molding stock • Saran tubing and fittings • Saran pipe and fittings.

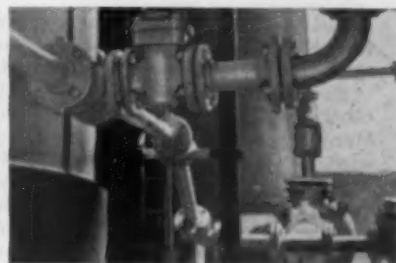
SOME OF THE MANY  
INSTALLATIONS USING

**SARAN LINED  
STEEL PIPE**

*Saran Lined Pipe is Manufactured by  
The Dow Chemical Company  
Midland, Michigan*



A large chemical company uses this installation to convey demineralized water. It has a perfect record of keeping the water free of contamination for five years!



Saran lined pipe used for conveying hydrochloric acid at temperatures from 20° to 90°C., has had no unscheduled interruptions due to corrosion for over two years!

you can depend on DOW PLASTICS

**DOW**





**Uncle Jake Said: "I Want You to Build Right Here."**

Employees today recall this; they built houses like these. "It made me feel I was the kind of workman he wanted around."



## Gives Model Town to People

How this company carries out an adjustment in living; similar program is launched at Espanola, Ontario.

● To those who have known of the close interrelation between KVP and the community of Parchment, Mich., built up around it, it will be of interest to learn that the two are now almost completely separated.

It had been recognized for several years that such a separation was inevitable, and when Dwight Stocker became president in 1952, both he and Alfred Southon, chairman of the board, felt the time was ripe to make the adjustment.

### A Story for Management Men

**PULP & PAPER** asked a long time ago for permission to write this story from KVP Co., because it seemed a story worth telling to all management men. Finally, permission was granted.

Here it is—an unusual story which points out "guide posts" for many other pulp and paper companies which face the same problems as KVP. Many a company, even in recent years, has been forced against its own wishes to build employe homes, institutions, whole townsites.

How KVP went about turning these properties over to the people and their governments and institutions in Michigan, and how it is going to do it in Ontario, is an intriguing story for any pulp and paper management man to read. There are lessons to be learned from KVP's experience.

"We are making the change," Mr. Stocker told **PULP & PAPER**, "because we believe people want to accept the responsibilities of the community in which they live. The change is now nearly complete here in Parchment."

The relationship between an industry and the community surrounding it is always a matter of interest to the students of our industrial and social economy. One of the most fascinating of such relationships, and incidentally one of the most successful, has long been the integration of the Kalamazoo Vegetable Parchment Co. (now The KVP Co.) and the little city of Parchment, Mich., which has grown up around it, on the outskirts of Kalamazoo.

For many years, almost since 1909 when Jacob ("Uncle Jake") Kindlberger and others founded the little converting plant that has since grown to a sizable group of KVP pulp and paper industries in the U. S. A. and Canada, it was almost impossible to

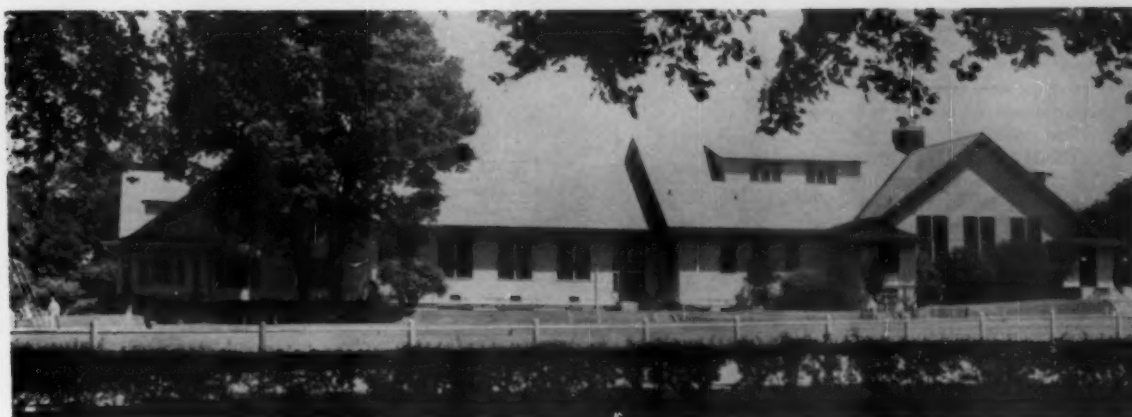
separate the company from the city, the church, and the school. They were as bonded together as the fibers of a good sheet of paper.

**NEVER A TYPICAL "COMPANY TOWN"**—Parchment was never a "company town" such as was common in the early part of the century in mining and mill areas. There were never rows of cheap houses for workers, never a company store from which the employes had to buy, never a tight supervision by "the owners" or "the mill" or "the company."

But there was, however, something of what might be called a "benevolent paternalism." The mill went far beyond the call of necessity to provide pleasant surroundings outside the mill and to make it easy for employes to take advantage of excellent living conditions. Because of this relationship, Parchment became known far and wide as a model community. It is no less that today. It is simply that it has "grown up"; that it is now strong enough to be "on its own."

**WHAT IT USED TO BE LIKE**—A little background is necessary. When the company was first formed, the only available building in the Kalamazoo area was an abandoned sugar beet





### Now A Church—Was Company's Community House

This is Parchment's Union Methodist Church now. About 1920, KVP built this for Community House. Auditorium seated more

than 500. Also had dining room, kitchen, apartments for company doctor and caretaker. Mill rented it to church, but gave back much more than amount of the rent in its contribution to the church.

factory in the middle of a corn field about three and a half miles from the center of town. There were just three farm houses near by. Some of the first employes boarded with the farmers. Others actually lived in tents pitched on the bank of the Kalamazoo River. Even the Kindlebergers lived in the top floor of a farm house, the bottom floor being taken over for office space.

The road to town was dusty in summer, almost impassable in spring and winter. People walked to work or rode bicycles when they could. It was hard to get good workers if good jobs could be found in Kalamazoo near the streetcar lines.

As the little company grew, it became important to have key men housed near by. So the directors approved the building of some good frame houses of three and four bedrooms. They were not "row" houses. They were built on lots from 50 to 70 ft. wide, and of 100 ft. or more depth. Eventually there were more than 50 of them. Most of them are still in good condition today, they are well kept up, and rentals on those still owned by the company are the biggest bargain in the area.

Surrounding farm land was purchased and subdivided, lots going at low prices to all who would buy, whether KVP employes or not. The company put in streets, water, curbs and sewers, and public utilities were extended from Kalamazoo.

### INVITED EMPLOYEES TO BUILD

—Mr. Kindleberger used to call employes into his office, or stop beside them in the mill and invite them to build.

"I well remember," one employe says, "that he took me almost literally by the hand, pointed out a lot, and said 'I want you to build . . . right

here.' It was a great compliment. It meant that he felt I was the kind of a workman he wanted to have around for a long time. He even promised to dig the basement and grade the yard. How could one pass up a proposition like that!" This was done many times.



**DWIGHT STOCKER, KVP President**  
—"We just want to be a good corporate citizen."

About 1920, shortly after the first paper mill was erected, the company built a large building which was named "the Community House." It had an auditorium seating more than 500 people, a large dining room and kitchen, and two apartments, one for the caretaker and another for a doctor and his family. The doctor was on the company payroll but was permitted as much private practice as he could assume.

The Community House was available for all public meetings, and was soon rented to the newly formed Union Methodist Church, an outgrowth of a Sunday School started in the first years of the company operations in private homes of the farmers near by. The mill charged the church a very low rent, then gave it back and a lot more as its annual contribution. In the early 30's a sizable gymnasium was added, and made available for the rapidly growing school.

Before many years the little community was incorporated as a village

under Michigan law, and when it reached a population of 750, became a city. It adopted a commission form of government. For a few years the commission had mill employes in the majority, as did the school board. Before long, however, the balance shifted and neither board now has a mill majority. This became the first step toward letting the community run its own affairs. Today some 1250 people live within the city boundaries and nearly all available land is taken up by houses. Several times this number live immediately adjacent and use the city's shopping facilities and schools.

### "UNCLE JAKE'S" HOME BECOMES PARK

—Mr. and Mrs. Kindleberger had bought a small farm opposite the first paper mill and had built a house at one corner. (Mill heads have always lived in Parchment, until Mr. Stocker, who already had a home in Kalamazoo when he became the president.) In the early '30's they deeded nearly all the farm, about 40 acres, to the city of Parchment to be made into a park. Then the mill took over the planting and care of the property, making it a show place for the entire area. Costs sometimes ran as high as \$30,000 a year for maintenance, with more than that in early years when it was being built.

It is obvious, therefore, that the mill was dominant in all city affairs. This was of course only fair. After all, it was paying more than 80% of the taxes in addition to the free services, and was entitled to a voice in how the money was spent.

Taxes to citizens were low, hardly more than a third that of neighboring Kalamazoo. "Everybody knew this was too good to last," a resident says, "but brother, how we did appreciate it while it did!"



**HOW HOMES WERE SOLD**—With the demands for tax equalization by the State and the County in the last several years, it soon became apparent that this situation could not last any longer. The mill was carrying too much of the tax load, the citizens too little. When Mr. Stocker came, the time seemed ripe to do what the KVP directors had felt for a long time was inevitable—to take the mill out of the community affairs as quickly but as painlessly as possible.

This had been given a slight start during the presidency of Ralph Hayward when one or two houses were sold to employees. A few more were sold when Mr. Southon was president. Now, under Mr. Stocker, all have been sold but 15. These are on land which the mill may some day want for expansion of office or manufacturing operations, and will be retained.

They were sold at very fair prices on terms quite attractive to the buyers. Most were purchased by the owner's personal funds or financing. A few were sold on land contracts, almost all of which have been taken up now.

**CHURCH GOES ON ITS OWN**—The second separation was that of the church. Within the past year the company offered the Community House to the church on a gift and purchase basis for \$27,000. The word "gift" is used advisedly, for it represented an investment of well over \$200,000. Although the church had lots set aside for a new building, this was too good a bargain to pass up, and it accepted the offer. The company also discontinued its annual contribution, for the organization now has over 700



**Replica of Cover Picture**

This is air view of KVP's Mills Nos. 1 and 2 and part of town of Parchment, described in this article. Mill No. 1 has capacity of 65 tons a day with 2 Fourdriniers; Mill No. 2, 185 tons, with 4 Fourdriniers. It also has 5 parchment machines and 13 waxing machines, pulp preparation equipment and power facilities. The company's General Offices and Central Research Laboratory Buildings are here.



**Mill No Longer Maintains Kindleberger Park**

This beautiful flower garden—if it could only be shown in color—is last part of the park which the City of Parchment took over.

members and is well able to look after its own finances.

This was indeed a real separation, for at one time the pastor had been on the mill payroll as well as that of the church. During the depression of the '30's the company had the minister take over the welfare work in the community. The mill itself was but lightly affected by the economic disruption of the period, running full nearly all the time. There were, however, a great many people in the community who had worked elsewhere, and everything possible was done to help out. Before long, the pastor was taken off the mill payroll, but the company gave the equivalent to the church toward his salary so that his pay was not reduced.

The church now rents its facilities to the company for such things as sales meetings, and one room to the city for commission meetings and justice court. The mill had previously given the latter to the city without charge. The school also pays rent for use of the gymnasium, but will shortly go into a new gym now in construction at the school. The mill had previously given the use of the gymnasium to the school for its many activities at a nominal rental.

**CITY TAKES OVER PARK**—The mill no longer maintains Kindleberger Park. The small section devoted to a formal garden was the last part to be taken over by the city. Mill employees who formerly worked in the park are now in the employ of the city, or have been absorbed by the mill. Included in the park property, but not a part of the original, is a point of land on the road leading into the city from Kalamazoo. The mill had planned to sell this for store or service facilities, but Parchment garden clubs urged the

city to buy it and develop it into a park and the citizens voted for the expenditure. The mill sold it to the city for less than it could have had from private sources.

Just two major real estate properties remain. One is a 40-acre plot adjacent to the park, purchased during Mr. Hayward's presidency and laid out with good streets. Rather highly restricted, it is attracting residents who are building houses up to \$50,000 in value. About half of these lots are already sold and are being built upon. The remaining area is a new business and shopping section along the river. The mill expects to sell this to the owners of buildings now leasing the land. When all this is done, the mill will be virtually "out of the real estate business" in Parchment.

**PLANS FOR WATER AND FIRE DEPTS.**—The latest separation was that of the water system, involving all the mains, a large storage tank, and the sale of water to the community by the mill. By gift and purchase, the system has been turned over to the city. KVP will continue to own the wells, which are on mill property. The city will pump, chlorinate, and sell to the users, even including the water used by the mill for sanitary purposes. The mill will of course operate its own system for water needed in paper-making, and for condensing.

Somewhat allied is the sanitary sewer system. The city is now building a sewage disposal plant on property sold to it by the mill, and all sewers will become a city responsibility.

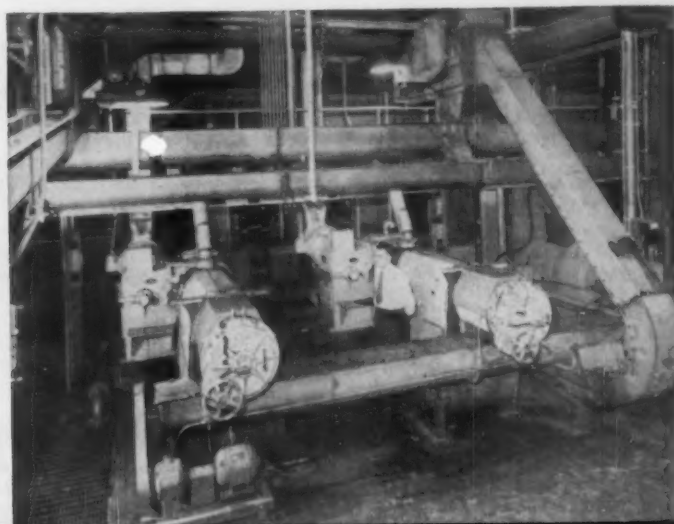
Yet to be separated is the fire department, now housed on mill property and manned by volunteer mill employees. As the mill will likely want to retain some fire fighting equipment,



THE  
FIRST

2

INSTALLATIONS  
OF  
*Bauer*  
PRESSAFINERS



Although the Pressafiner is a new and unique machine, three installations are already operating and three other installations are being made.

Pressafiners afford the following advantages in NSSC pulp mills:

1. Stream pollution is controlled by a 65% reduction of total mill B.O.D. requirements.
2. Pressafiners remove 50% of the total B.O.D. rich waste liquors associated with NSSC chips.
3. The expressed liquor combined with the digester blow-down liquor is disposed of as highly satisfactory road binder.
4. A reduction of 20% to 25% in total refining

power may be effected by the pre-refining action of the Pressafiner.

5. Stiffness of the corrugating medium is retained with 20% to 30% increase in headbox freeness.
6. Removal of waste liquor has prolonged felt and wire life.
7. Operation of Pressafiners is simple.

These data are presented in the conclusions stated in a paper, "Development and Use of the Pressafiner at Green Bay," by William Nelson, Technical Director of Green Bay Paper & Pulp Co., Green Bay, Wisc. If you haven't read it, we'll gladly send you a reprint.

**T H E   B A U E R   B R O S .   C O .**

**1715 SHERIDAN AVE. • SPRINGFIELD, OHIO**



it will be necessary for the city to erect a building of its own and arrange for needed equipment and staff.

All these changes have been effected with remarkably little friction or difficulty. It is, to be sure, not easy in all cases. A community of but few over 1,000 people must pay for and maintain services that would cost little more, even with several times that population, for the tax base is small but for the mill.

**HOW ACCEPTED BY TOWNS-PEOPLE.**—"It's only natural," the consensus runs, "to want to spend as little as you can on taxes. But if we are honest with ourselves, we have to admit that we have had it too easy. We have had everything our neighbors in Kalamazoo have had, and perhaps a little more, yet at far less the cost to us. It isn't fair to the mill to make them pay for it. It is in competition with firms who have not had to do anything like this, and have been paying more than similar mills in Kalamazoo proper. Even yet, it carries nearly 70% of the local tax burden. I guess it's time we grew up and assumed our share. In fact, I think it is a good thing we now no longer have any pressure whatever, real or implied, from the mill. But boy, it sure was good while it lasted!"

"We hope to do the same thing at Espanola (Ontario)," Mr. Stocker states. "In fact, a good start has been made. It will take a number of years, but we believe the citizens of Espanola are just as eager as those of Parchment to accept their community responsibilities."

**WHAT WILL HAPPEN AT ESPANOLA?**—Here the situation is somewhat different than it has ever been at Parchment. When The Spanish River Co. (later taken over by Abitibi) first built the original ground-wood mill, they had to carve it out of the wilderness. So a completely company-owned townsite was laid out, and some 180 dwellings were erected. There were also three churches, a 60-room hotel, a school, many store buildings, and a community hall. It also provided water, streets, sewers and electricity.

When KVP purchased the property and began to operate the new sulfate mill in 1946, it repaired the houses and buildings and added more than 100 other dwellings (some of them apartments) in order to have housing for the greatly expanded employee personnel. Affairs of the city, now with more than 1,800 residents, are administered by a subsidiary of the company known as the Espanola Development Co. Ltd.

Shortly after KVP took over the townsite it deeded the church property to the three congregations. About a year ago employees and merchants were given the opportunity to purchase their residences and store buildings. About 10% have already taken advantage of the offer and more have signified their intentions to do so. It is not a project that will be completed overnight, or even for some years, but it is in the making and some day Espanola will join Parchment as a community wholly owned and governed by its citizens.

"People in a democracy," concludes Mr. Stocker, "seek freedom but they also welcome responsibility. KVP, as a corporate citizen, will carry its share, and the changes which are taking place are part of an overall effort to create the best possible climate to establish the true relationship between the community and the company. The sale of houses, buildings and lots at Espanola mark the beginning of a similar plan in the community there. We just want to be a good corporate citizen."

## New Sales Lineup Picked for Pusey & Jones

Pusey & Jones Corp., Paper Machinery Division, Wilmington, Del., has a new sales force lineup in the field and a new general sales manager, Sidney G. Briscoe, a 20-year veteran with P-J. Mr. Briscoe was moving back to Wilmington from West Hartford, Conn., where he was New England sales representative the past two years.

He was born at Brewer, Me., and is a graduate of the University of Maine forestry school. His father, the late John M. Briscoe, was head of this school and forestry professor at Maine for years.

Ralph Johnstone continues as vice president, Paper Machinery Div., Pusey & Jones. He has recovered from a recent illness, but his work will be on special projects and include coverage of the Far West.

Sam Bratton is the new chief engineer of P-J, where he has been in paper machinery development and engineering for many years.

Covering the South from Virginia to Texas is Howard B. "Whitey" Wilson, 128 East 66th, Savannah, who is a product of U. of Maryland and U. of Delaware, who has been with P-J, eight years.

Alec McInnes, Midwest sales-engineering rep., will live in Wilmington; Louis Connor covers northern

## Wage Increase in South; Up 4%-5% Over U.S.A.

In many pulp and paper plants over the country, 4% to 5% wage increases have been accepted. They actually amount to from 5 to 11 cents more per hour for many thousands of workers.

Southern Kraft Division of International Paper, as customary, set a pattern for most of the Southern paper industry by its agreement to a basic 5% wage increase. The AFL unions described the increases as actually ranging from 7 to 14 cents per hour, or an average of 8.8 cents. A new base rate of \$1.51 is established.

Adjustments to correct inequities on a large number of jobs, the unions said, ranged from 2 to 5 cents per hour. A new hospitalization plan, paid in full by International was accepted. A one week's pay for sick leave of two weeks or more for 6 months employees also was adopted. For International, the agreement covers 9 mills and 12,000 workers. (Pacific Coast agreement in June PULP & PAPER, page 70.)



### New Pusey Jones Sales Execs

SIDNEY G. BRISCOE (left), is new General Sales Manager, Paper Machinery Division, Pusey & Jones Corp., Wilmington, Del. With P-J for 20 years, he was moving back to Wilmington from New England, where he has been Sales Rep. for two years.

HOWARD B. (WHITEY) WILSON (right), is new Sales and Engineering Rep. for South-Virginia to Texas. His residence and base, 128 East 66th, Savannah, Ga.

N. Y. and Penn. out of Wilmington, and William Strickler does likewise in covering the rest of the Middle Atlantic area.

Harry Farra Jr., whose father, the late Harry Farra Sr., was Moore & White sales manager, covers the New England states.





## BAREFOOT BOY-1910

That's earnest, capable Art Meyer. Raised on a farm, Art was a crack rabbit hunter, but he never skipped a daily chore. And for 30 years his on-the-job reliability has been reflected in the dependable performance of the felts he helps produce. Art's in the dry finishing section—a specialist in the napping operation which teasels soft felt surfaces for certain paper-making requirements.

The skill and experience of Art Meyer, and others like him, are characteristic of the Appleton Woolen Mills . . . a 73-year-old organization dedicated to development, progress, and the production of ever finer felts—for the finest paper-making.

## APPLETON WOOLEN MILLS

APPLETON, WISCONSIN





## Runs 50% Solids

### In Size Press Coating

The coating meeting was packed back to the doors, as delegates had all ears cocked to hear something about the new size press coating techniques.

They heard of one or more mills running 50% solids with size press coating. One Ohio mill was converting to this coating process, going into high solid pigmentized coating. Lightweight coatings were being made at this point of the machine, and a 4 lbs.-per-side coating was reported as relatively free of pattern, using chlorinated pigment sizings and oxydized starches.

Physical defects of a size press had to be corrected for even heavy coating across a sheet. Considerable discussion of corrosion ensued, and the

experts seemed agreed little if any corrosion occurs, but where it does, it would be due to steam, rather than starch or other chemical ingredients.

Some mills trying the new process were reporting getting streaks and uneven coating. They found they can't go to high temperatures. Some advantages were reported in cooking starch with pigment.

Bone glues were reported successfully used in size press coating. Also plasticizers down to 0.5%, but one mill reported going as high as 5.0%.

F. Leroy Zellers, Chillicothe Paper's mill manager, as moderator, gave an artistic performance of how to get coating experts to talk when they don't want to! Leonard Wood, National Starch, started the ball rolling with some prepared comments.

**CUTTING CLAY HANDLING COSTS—Manager-Dr. William J.**



### The South Comes Through Again!

#### For 4th Time Since Ray Bennett Broke Long Northern "Ice Jam"

In the past 20 years there have been two Southern industry executives who became Presidents of the Superintendents Association. At Cincinnati, another Southerner was elected Vice President. So PULP & PAPER posed him with the two gentlemen he is going to emulate in years to come—the Past Presidents, you see, are congratulating the new President-to-Be a few minutes after his election was announced.

**RAYMOND F. BENNETT**, President in 1947-48. He was then Gen. Supt., Ecusta Paper Corp., now he is Mgr., Cellophane Div., Ecusta Paper Corp. Div. of Olin-Mathieson Corp., Pisgah Forest, N.C.

**TOM S. COLDEWEY**, new Fifth Vice President—to be President in 1960-61. He is Production Vice President of St. Joe Paper Co. He is Vice Pres. in charge of Production, St. Joe Paper Co., Port St. Joe, Fla.

**GORDON K. SINGLETARY**, President, 1952-53. He was then Supt., but is now Plant Mgr., Brunswick P & P Co., Brunswick, Fla. Mr. Bennett's convention was in New Orleans; Mr. Singletary's in Atlanta; Mr. Coldey will select site in 1961.

**HOWARD WEHR**, Harriman, Tenn., Mgr. for Mead Corp., is, of course, a Southern border state executive, who gets into the President's chair ahead of Mr. Coldey—his year is 1958-59. Mr. Wehr appears in a group picture elsewhere in this story.

Thus, since Ray Bennett broke the long "Northern ice-jam" there will be four Southerners in the top seat in just 13 years. This makes **BILL BRYDCES**, a retired Virginia gentleman, President back in 1933-34, very happy.

Continued from page 44

Foot of Consolidated W.P.&P.'s Wisconsin River division told how his mill is cutting costs in its methods of handling about 180 tons a week of bulk clay for 115 tons per day of mineral surfaced book paper. Marlin Carver, coating supt., at the same mill, helped prepare the paper.

There are 3 Consolidated mills making coated book paper, and all of them will have some type of continuous make-down for bulk clay. Dr. Foote described the make-down for dry bulk clay at his mill, and said it was almost identical with one at Consolidated's Biron division. Wisconsin Rapids is revising its facilities to handle bulk clay (it has been on tank car clay for years). Dr. Foote praised make-down methods at Provincial Paper Co., in Canada, and said some new methods of handling were being developed at Fox River Valley mill.

At Dr. Foote's mill, the changeover from tank car clay to bulk was to offset rising freight rates. A Fuller Airveyor with screw conveyors was installed. The Airveyor is rated at 7.5 tons per hour, 4 to 6% moisture. Agitation in two make-down cells consists of 6 half-paddles, water is added for a 70% slurry, and a dispersing agent if clay is not predispersed. Circulation is from bottom to top via a 300 gpm centrifugal pump, with 6 in. inlet and 4 in. outlet. Both clay and circulating slip are introduced into the center of the cell from the top, close to the agitator shaft. Clay is directed through the circulating slip so, in effect, getting an immediate pre-wetting.

One paddle must be just below the final slurry surface to take care of floating dry clay. One make-down cell has paddles arranged to handle 45-50 ton cars, the other, 70-73 tons. Clay can run at Airveyor capacity until solids reach over 60%, then the rate must be decreased.

With predispersed or pulverized clay, instead of lump clay, handling is improved. The addition of the last 10% of the car, with the former types, can be somewhat more rapid.

After all clay is introduced into the make-down cell, in 6 to 7 hrs., the slip is agitated and circulated for some 18 hrs. to make it ready for screening. With spray-dried clay, 8 hrs. is usually enough.

**ADVANTAGES OF SPRAY-DRIED CLAY**—Dr. Foote said the only type of clay that can be successfully unloaded from hopper-bottom cars, at



reasonable cost, is spray-dried. Other types must be air-lanced or raked to keep the outlet filled. With spray-dried, a Cleveland Vibrator Co. air-loaded vibrator, Type LSSR Size #3, is used. Total man hours to attach fittings and unload a 48-ton car is 4 to 4.5. He said this could be reduced to 1 man-hr. per car, if car has a 60° instead of 45° slope.

He liked spray-dried clay because of lower moisture, higher density, cleaner delivery and easy wetting and dispersing, even at high solids. Hopper cars are unloaded at Wisconsin River at a rate of 10 to 13 tons an hr.

Robert L. Ringwood, sales dept., Henry Pratt Co., Chicago, who is their specialist in equipment for this industry, presented a thorough-going description of the new automatic starch cooker which company is building, having developed it in collaboration with Penick & Ford. Nothing is left to guesswork. This is called a Hygelator, and the biggest one yet built is in one of the big mills of the South. It has a pushbutton control and Lightning Mixers are used in the operation. Henry Pratt also has made custom-built laminators for board mill.

## A Unique Process

### Watervliet's New Equipment

Another meeting devoted to newer trends of manufacturing was in high yield pulping.

Louis J. Scheid, superintendent, Watervliet Paper Co., described the new unique 60-ton bleached neutral sulfite pulping process being introduced in his mill, first announced in an exclusive report published in the July 1955 issue of PULP & PAPER. It is a misnomer to call this a semi-chemical process, as he revealed.

The new pulping and recovery process enables this Southern Michigan mill to use once-scorned hardwoods which grow virtually just outside its doors.

The resulting pulp will be mixed up to 50% or 60% with purchased bleached kraft or sulfite pulp for an expanding production of top quality coated book, offset and litho papers. A few years ago, no one dreamed such expansion in the Lake States book mills would be possible.

Watervliet has operated a 10-ton pilot plant for some years and finds its hardwood pulp will have good formation, strength and porosity, excellent folding qualities and high tear. Beating and refining will be drastically cut.

Of the various hardwoods available, aspen is the most desirable; oak, the least.

## PULP & PAPER Camera Finds Conventioners Not Usually Pictured



### "Champions" Get in Huddle

ROBERT O. STEPHENSON (left), Asst. Production Mgr. of Champion Paper & Fibre Co., Hamilton, O., mill, is slated to become Chairman of Miami Valley Supts. Division this fall. JOHN RAMSEY (right) didn't have to go to Cincy to talk with Bob—John is General Supt. of Champion Paper Mill at Hamilton.



### "Looking Up" for Tom

"Supers" who wanted to talk to him in Cincy had to keep their chins up (l to r): TOM C. JOHNSON, Gen. Operating Supt., Union Bag & Paper, Savannah; JOE A. STAUDL, Pulp Mill Supt., Camp Mfg. Co., Franklin, Va.; FRANK LIBBY, Manufacturing Consultant, and LES LA LIBERTE, Supt. of Mill 2, both of KVP Co., Parchment, Mich.



### New Englanders Met, Too

RUDOLPH T. GREEP (left), Production Mgr. of S. D. Warren Co., Cumberland Mills, Maine, finds a transplanted "Down Easter"—ROBERT J. VAN NOSTRAND (right), Pulp Sales, Midwest Representative, Brown Company, Berlin, N.H. Rudy went east from his native Kansas, but he still owns a farm out there. Bob moved to Chicago after working in mill research at Berlin and two years in New York. He took over territory of Brown's retired veteran, Bill Gilman.



### Grooming "Bix" and "Jack"

Last month (July issue) we ran photo of EUGENE L. WARD, new Chairman of Supts. Association Affiliates, who is also Sales Vice Pres. of Cameron Machine. These two men are "tapped" to come along behind him:

MILTON M. BIXBY (left), Director of Sales, Paper Makers Chemicals Dept., Hercules Powder Co., Wilmington, Del., is First Vice Chairman—therefore slated to become head of the Affiliates at the Lake Placid, N.Y., meeting June 12-14, 1956.

JOHN D. DICKSON JR. (right), Lakes States Rep. for Stowe-Woodward, Inc., whose home is Kalamazoo, will be groomed for the top spot in 1957. He is Second Vice now.



### 113 Years of Papermaking

The hotel sign behind apologizes for elevator overhauling—J. W. (WES) YOUNGCHILD (left) and CASPAR YOUNGCHILD (right) certainly owe no apologies for their long years of making paper. Cap, 57, was born in Merrill, Wis., and Wes, 56, in Greenleaf, Wis., and both started in the old Marinette-Menominee Paper Co., back in the late 1890's. Cap has been consulting for years for many companies—I.P., Crown Z, and down the line in size. Wes is newly appointed Wis.-Mich. Tech. Rep. for J. E. Rhoads & Sons, leather belting, working with Midwest Mgr. KEN McCLELLAND, and will also work in other areas all over U.S.A. Wes recently retired at North Tonawanda, N.Y., I.P. Mill. These are just two of 5 Youngchild papermaking brothers—BILL YOUNGCHILD, St. Regis, Tacoma, Wash., Boss Machinetender, retired last year with a longer record than any of them. RAY is also retired, but ARCHIE is still on the job at Scott Paper, Everett, Wash.



**SECRET OF SUCCESS**—The secret of success here is a Mead Corp.-patented recovery process, which that company has been holding "on ice." It eliminated the pollution problem, so Watervliet could go ahead. It will be used here for the first time commercially, with Babcock & Wilcox designing equipment. The final processed effluent will have no sodium sulfite. Liquor is burned as in a typical kraft mill in a B&W water-walled recovery furnace and green liquor then goes to make up fresh cooking liquor.

Chemical debarking will require very little labor in the woods. A Pettibone-Mulliken Cary-lift will handle wood. It will be barked by a portable D. J. Murray Co. Clark-Adams type barker. The company will be buying peeled wood. The chipper is a D. J. Murray 10-knife model, but using only 5 knives. Link-Belt provides the chip screening.

**TO USE STAINLESS-SPRAYED DIGESTERS**—Three Wise & Wagner Co. (Akron, O.) rotary digesters are being fabricated by Ohio Boiler, and each is to be sprayed with stainless steel. For aspen, cooking requires 450 lbs. of sodium sulfite per cord.

In this unique process, chips are dumped to the basement level where washing is to be done in a V.D. Anderson diffusion-type extractor, followed by a V.D. Anderson expeller.

Next the pulp goes to a Sprout-Waldron refiner, after which stock goes to pre-bleach storage. Pulp is around 50 brightness before bleaching.

Liquor will go to a Swenson evaporator ahead of the B&W furnace.

**UNIQUE BLEACH PROCESS**—The bleaching process: Direct chlorination, followed by acid wash and mild alkaline extraction. A decker type washer is used here, followed by a Trimble screen. Next is a calcium hypochlorite bleach stage. The final washing is over a vacuum washer.

Yield is 72% to 74% unbleached and after bleaching, it will drop to 64% or lower, sometimes as low as 50%. Short fibers, high mullen and

tensile is what Watervliet will want for its coated paper, and high printability qualities.

**POWER REQUIRED AT FILER CITY — 270 KWPHT** — Richard Knechtges, pulp supt., Filer City, Mich., semi-chemical pulp and board mill, described the revolutionary changeover made at that mill, enabling it to use Michigan hardwoods. Its past history had been jackpine kraft, and before that, straw. The story of this mill, 30 minutes from chips to hi-density storage, was reported in a fully-illustrated feature article in PULP & PAPER, June, 1954 issue.

Mr. Knechtges reviewed the process through Chemi-Pulper continuous digesters, Sprout Waldron refiners and Sutherland screw press washers. He said his mill gets 78% bone dry yield after a 12-min. cook.

He said power requirements were 270 kw per hr. per ton of pulp, including the woodroom, where an Allis-Chalmers Streambarker and Carthage chipper are major units. He conceded Michigan hardwoods are hard to bark. Filer City requires only two men in its push-button centrally controlled pulp mill.

"Corrosion is a major problem in semi-chemical pulping," he said. "You might as well virtually build your mill out of stainless steel."

He reviewed the new recovery systems for neutral sulfite or semi-chemical, mentioning the Mead process going in at Watervliet, Western Precipitation's system being tested in Wisconsin, the Sterling Drug-Salvo Chemical liquid oxidation system at Hammervill.

**NICKEL-PLATED WIRE SUCCEEDS**—The manager of another semi-chemical board mill, in commenting on corrosion, announced the startling news that his mill had been losing wires every two or three days. He struck on the idea of a nickel-plated wire. The wire weaving firm refused to make it on their own responsibility. But he told them to go

**HARRY E. HADLEY**, 22-year veteran executive with Gardner Board & Carton, member of a famous paper-making family, became "OFFICER EX-OFFICIO" as he ended term as 31st President.



### Hadley Recommends

Outgoing President Harry Hadley of the Superintendents, in his "swan song," recommended that the association should enlarge its central offices in Chicago, or in some way provide assistance for Harry Weston, secretary-treasurer, so he can spend more time visiting and counseling with Divisions.

One of his last official acts was to present a life membership in AP&PSA to E. T. Gardner, board chairman of Gardner Board & Carton Co., who is a 57-year veteran of this industry.

See July issue, PULP & PAPER, page 133, for news of 1955-56 AP&PSA officers—including picture and story of how new President Howard Street got himself into this industry via an architectural wood-working firm.

ahead. The nickel-plated wire lasted 3 weeks, and successors have done well.

Do wood acids cause the heavy corrosion in semi-chemical mills? This question was raised but unanswered.

J. D. Dailey, production mgr., Riegel Carolina Corp., gave an "off-the-record" talk on new hardwood semi-chemical installations at his mill, now making an exceptionally clean pulp from mostly gum for glassine-greaseproof. Publications were asked not to report his comments at the present time.

**STAINLESS STEEL REQUIRED**—A Southern border states mill reported changing brass valves and virtually every other stock-contacting piece of equipment to stainless steel. A solid stainless steel blow tank was installed

### Cutting Clay Handling Cost; One of These Told How

**DR. WILLIAM FOOTE** (left), Consolidated Water Power & Paper Mgr. of Wisconsin River Div., who told how his mill handles 4 carloads a week of coating clay (180 tons) to make 115 tons daily of coated book paper. Because of freight rates, his mill went to dry bulk clay with Fuller Airveyor and screw conveyors. Only spray-dried clay can be successfully unloaded from hopper-bottom cars with reasonable labor cost—lump or pulverized clay must be lanced or raked, he said.

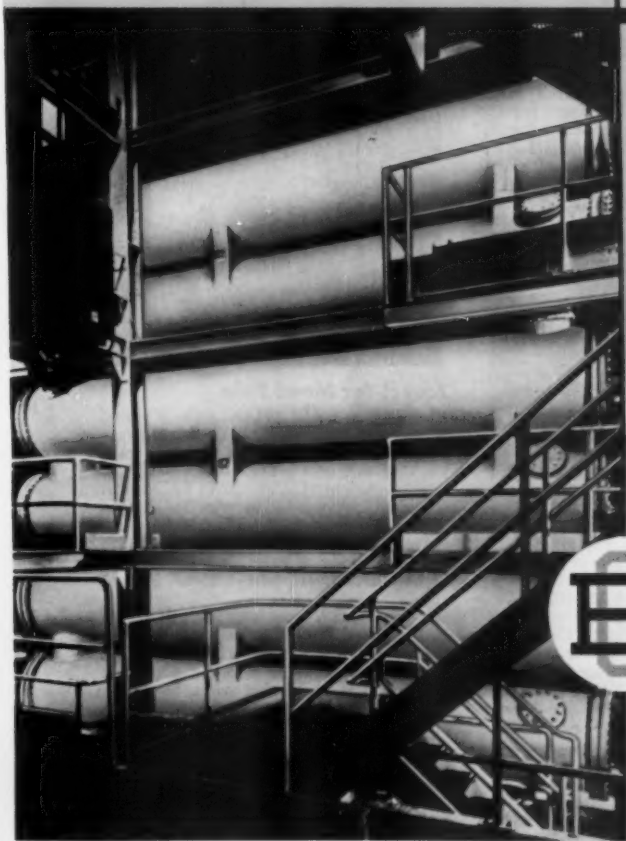
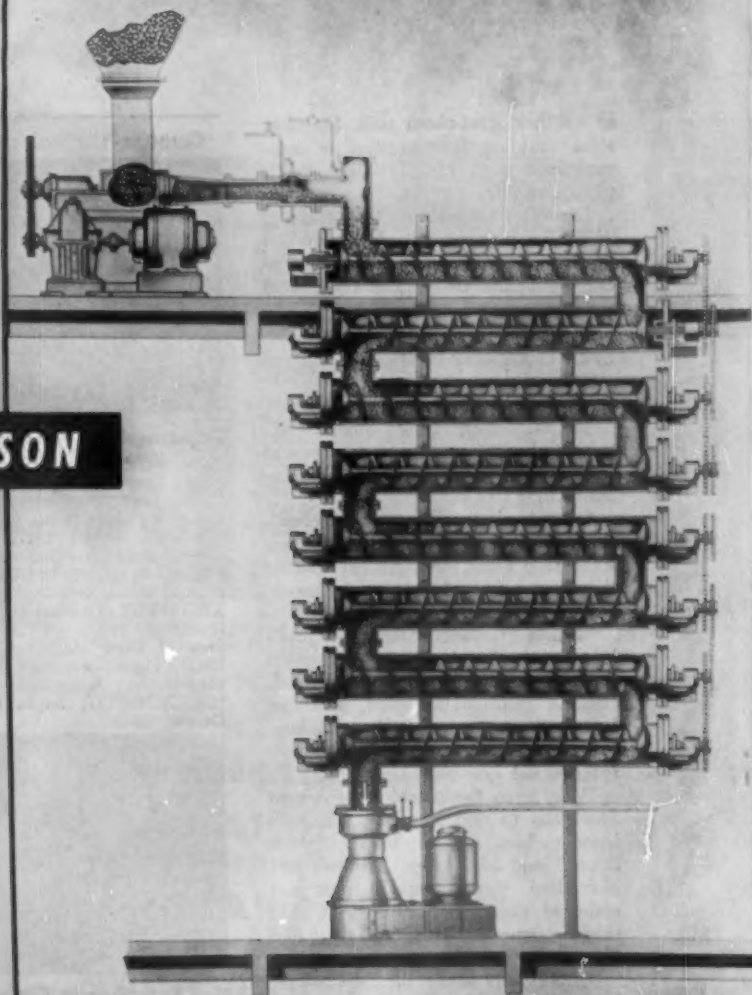
Giving Dr. Foote moral support were his colleagues: Maine-born **JAMES A. RUSH** (middle), Mgr. of Consolidated's Stevens Point, Wis., wax-tissue mill since 1941, and **LEONARD SMITH** (right), veteran Mgr. of Consolidated's Appleton, Wis., sulfite pulp mill.





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at another semi-chem mill. Stainless steel cladding for digesters is commonplace now, also stainless tanks, pipes and filtrate tanks.

Larry Murtfeldt, Consolidated W.P.&P. pulp superintendent, summed up the story on semi-chemical pulping, as he has done so effectively in the past.

### Even Company President Likes "Recognition"

Joe H. Ayers, Armco Steel Corp., opened the convention, after the usual preliminaries, by discussing "The Human Thing to Do."

"Individual workers want recognition, an opportunity to be heard, some sign from management so that they can take pride in their importance," he said.

"Union grievance committee problems often hatch from a situation where a worker was not recognized, became emotionally upset, and just had to find someone to listen to him. Often, the problem need never have reached the grievance committee.

"Why even the president of Armco Steel has to find someone who will listen to him, and so do other presidents," said Mr. Ayers. "Haven't you ever had your company president come to you and ask, after he has made a speech: 'How did they like it?'"

"Supervisors make themselves into leaders by the way they look at other people. Don't look up and don't look down. The spiritual quality of your character is the important thing."

**REESE SAYS "SHARE" COMMUNITY PROJECTS**—Charles H. Reese, 1949-50 president of the Superintendents, and vice president in charge of mfg., Nekoosa-Edwards Paper Co., said in the lead-off talk at a community relations session, that the success of any company's program in this field is based on "sharing, not just giving."

He reviewed many projects in which his company participated, contributing tens of thousands of dollars to community improvements, but in every case the residents of the community were asked to be "a partner"—to pay a share out of their own pockets.

"People take greater interests in projects in which they have contributed time or money, as compared to an outright gift," said Mr. Reese.

"Development of community relations is sufficiently important to require the assignment of an individual within the company for the organization of the program. He must be familiar with the community, and have

### Camera-Shy Delegates are Spotted by PULP & PAPER Cameraman



#### Papermakers from Five States

Eyes were on LEON WHITE (left), Supt., Central Fibre Products Co. Inc., Tama, Iowa, who might have just said something about Iowa corn stalk paper. His mill doesn't make it—but other Central mills make debarked straw pulp. Others, l to r: TED L. COLEMAN, Supt., Central Fibre, Hutchinson, Kans.; HOWARD WEHR, Division Mgr., Mead Corp., Harriman, Tenn. (who is now 3rd Vice Pres. of Supts. Assn.); GEORGE SUDAM, Paper Mill Supt., Riegel Corp., Riegelsville, N.J., and GERALD L. HENDERSHOT, Supt., Central Fibre, Denver, Colo.



#### Get Together in Cincy

(L to r) ELWOOD EBIE, Pulp Research Dept., Champion Paper & Fibre, Hamilton, O., a veteran of industry technical circles. EARL GAUDET, Mill Supt. for past 2½ years at Standard Paper Mfg. Co., Richmond, Va. He had been for 15 years with Tileston & Hollingsworth, Boston, Mass. DONALD GOODMAN, Gen. Supt. for past two years at Sorg Paper Co., Middletown, O. He has been there 17 years, since graduating from Purdue.



#### They Were "Making Board"

At Cincinnati these board mill engineers and operators talked shop (l to r): GENE FAULKNER, Project Engineer for over a year at Gardner Board & Carton, is a Cincinnati U. graduate; KAS HORITA, born in Tacoma, Wash., he has been Supt. of Lake Shore Plant, Container Corp. of America in Chicago for 7 years; he studied at Illinois Institute of Technology; DICK CONGREVE, Plant Engineer at same C. C. of A. Lake Shore board mill.



#### These Folks on Same Team, NOW

Robert Gair Co. Inc.'s "\$150,000,000 sales a year" merger with Southern Advance-Great Southern brought together these friends and, now, business associates. One of big things Gair is going to do at its new Southern Advance Division, Hodge, La., is add a new 246 in. Beloit machine, and is also increasing production at its own Southern Paperboard mill near Savannah. Left to right: S. NELSON MICHAUD, Asst. Paper Mill Supt., Southern Advance Bag & Paper, and one of 5 Michaud brothers in management there; MRS. RUTH MICHAUD, his wife, and CHARLES MCCARTHY, Vice Pres. and Plant Mgr. of Gair's Southern Paperboard operations. From Milo Junction, Me., Steve Michaud, father of the brothers, went to Louisiana to head up new mill for New England owners. Besides Nelson, the sons are: JOHN, age 46, Resident Mgr. at Hodge and newly elected Director of Robt. Gair; JAMES, 47, Finishing Room Supt., and HENRY, 50, in charge of town upkeep and projects at Hodge. NELSON is 48.



#### Travel for Mead Pulp

ROBERT CALLAHAN (left) and C. WOLCOTT HENRY (right) are young members of Mead Pulp Sales team working out of Chicago under Midwest Vice President, DAVE BRITTAIN. Mr. Callahan, army pilot in war, is 33, was born in Elmora, Pa., graduated from St. Francis College, Loretto, Pa., was with Abitibi newsprint sales and service out of Dayton, O. He joined Mead in Jan. 1954. Mr. Henry, 28, was with British forces in India and later U.S. in Arabia during the war. Born in Cincinnati, he graduated from Princeton. Was with an economic research firm in Florida when he joined Mead in Jan. 1954, working a year in the Ohio mill before moving to Chicago.



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On this program, R. C. Skillman of Champion's public relations dept., extolled movies as a selling medium, for mass communication, expressing his preference over radio and television. Tom Johnson, gen. supt. at Union Paper & Bag, gave a paper by Kirk Sutlive, public relations manager of Union. He said good community relations are impossible without good employe relations and good supervisors.

#### It was same Superintendents National Again—But Some New Faces



#### They Had Important Messages

In two outstanding talks at Cincinnati, CHARLES H. REESE (left), Vice Pres. of Nekoosa-Edwards, said: "A company should be a partner with a community; the citizens of the community should pay a share of the costs of town improvements, so they have a real part in them, along with the company."—And JAMES A. HOLEKAMP (right), of Sylacauga, Ala., Southern Logging Engineer and Representative for American Pulpwood Assn., predicted the Southern pulp mills will increase their use of sawmill "left-over" chips by 10 times—to 2,500,000 cords of pine chips per year.



#### Hosts At Cincinnati

Convention was so close to their Hamilton, O., Miami Woolen Mills, that Shuler & Benninghofen had many visitors. Helping to show them around were these two production and sales execs—"Inside Men" (to differentiate them from Hamilton Felts traveling men): HERB ARENT (left) and JOHN BENNINGHOFEN (right), whose great-grandfather, JOHN W. BENNINGHOFEN was co-founder of the firm with ASA SHULER back in 1858. Mr. Arent, born in Los Angeles, attended Miami Univ. and Phila. Textile Institute. Young John B., son of Mark Benninghofen, was born in Hamilton, graduated from Ohio State '35.

#### South Will Be Using More Sawmill Chips

One of the most significant talks at Cincinnati was by James A. Holekamp, Southern logging engineer for the American Pulpwood Association, who bases at Sylacauga, Ala. He said the South "will be using 2½ million cords of pine chips made from sawmill waste."

This big saving in wood use is as good as planting 83,000 acres of trees



#### Sugar Men Get "Sweet"

Reports Hawaiian Sugar Planters Assn. is more actively planning for bagasse pulp or paper mill (See PULP & PAPER's World Review, just out), preceded tour of America by Florida-born WILLIAM A. ROBINSON (left), Senior Technologist, Pulp and Paper, Hawaiian S.P.A. He has been Tech. Director or operations supervisor in mills in South, California and Mexico. (Atenquique). Chatting with him on vegetable fiber pulping at Cincinnati are BERNIE M. BAMER, Mill Mgr., Stone Container's Coshocton, O., Paper Mill, and ROBERT FULLER (right), Chicago, Asst. Vice Pres. of all Stone Container operations—3 mills, using straw and waste paper, and 5 box plants.



#### "That's What I Like About South

Says GEORGE N. KEMP (left), Pilot Plant Supt., Herty Foundation, research center at Savannah, Ga., and it brings chuckles from ROBERT J. MADER (middle), Production Mgr., Biron Division (Wis.) of Consolidated Water Power & Paper, for whom he has worked 22 years, and JOSEPH KUBICKA (right), Gen. Supt., John Strange Paper Co., Menasha, Wis., where he went from Container Corp. of A., Chicago. Joe is a graduate of Illinois Tech. George shows he means what he says, for he went to Georgia Tech and worked in South at O. B. Andrews Container, Chattanooga, (now C.C. of A. mill), before he went to Savannah.

every year for the next 30 years. Already the South is using 250,000 cords of sawmill chips, enough to keep a 400-ton pulp mill going.

Benefits of this trend, he said, are: (1) More diversified supply. (2) Alleviated competition for pine stumpage. (3) Better relations among all wood industries. (4) Strengthening of community relations. (5) Development of more young staff men. (6) High quality products—slabs and edgings are sapwood mostly, with few defects. (7) Stabilizes related consumption of wood for related industries.

Already 40 sawmills are selling chips to pulp mills in the South. A few Southern pulp mills will reach 40% to 50% usage of sawmill chips; others will reach 10% to 15%. One Southern mill is using 50,000 cords, 10% of requirements, and expects to double it.

**PROFITS ARE GOOD**—"The speed in which this is expanding shows the profit incentive is good," said Mr. Holekamp. "It has also resulted in improved types of chippers, as they were necessary."

A manufacturer of portable barkers and chippers told PULP & PAPER that this talk confirmed evidence he has that the investment in this type of equipment for portable and sawmill use in the South will be more than justified economically, even though it seems high today to many.

Mr. Holekamp wandered from his South to comment that he heard that in the Far West, one mill is using 80% sawmill chips, and several, 40% to 50%, and he said the West taught the South the value of this chip source. Gen. Supt. A. C. McCorry of St. Regis corrected him with even later figures—he said today two Far West mills now use 100%; his own mill at Tacoma, Wash., uses 40%.

**KIMBERLY - CLARK'S FOREST AIMS**—J. B. Millar, of Kimberly-Clark Corp.'s 120-man staff of foresters, warned against "rash predictions being made as to results that may come from forest genetics." He said his company aims at the optimum number of stems per acre; is using heavy planters in rough terrain to make them productive, seeks to grow better quality wood.

"But we are not prying into the love life of the caterpillar—we leave that to the universities. We prefer control of pests by their natural enemies. We have a pathologist and an entomologist, but actually they are spending more time in the woods than in their laboratory."

F. J. Czabator, of N. Y. State University, said 190,000 cords of peeled

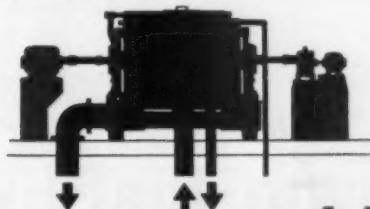


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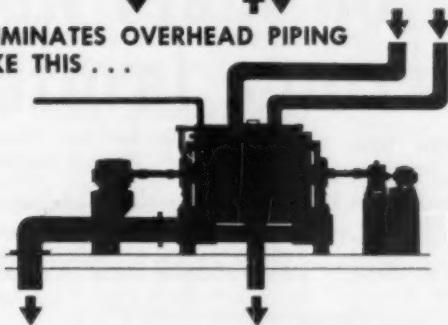


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As a top performer in pulp screening, the Impco Lindblad has many outstanding features. For instance, due to its unique vat design, at no extra cost to the mill, sub-floor piping is possible. This means significant savings in piping expense on the runs for inlet and outlet piping. The neat arrangement provides uncluttered tending aisles and requires minimum floor space in either single or multi-screen installations.

These higher density type vibrating units are delivering quality pulps at densities above 1.5% A.D. in bleached, unbleached, semi-chemical and board mill installations.

For complete information on this screen, send for Bulletin B4-1.

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SHERBROOKE MACHINERIES LIMITED, SHERBROOKE, QUEBEC  
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wood will be produced by chemical barking in 1955, at rates of 40 cords per man-day.

At Anglo-Newfoundland's 800-ton newsprint mill, using 350,000 cords annually, an elaborate system of mechanization—conveyors, steel flumes, traveling stackers, etc.—has cut manpower requirements down by one-third in summer, one-half in winter, saving about \$250,000 a year in operating labor, and another \$120,000 in maintenance labor and material. So reported Jack Cater, wood handling supt.

**NEW WAYS TO SALVAGE WASTE PAPER**—At a paperboard session, Ralph Kumler, long time American Cyanamid technical director, and now with the Waste Paper Utilization Council, told how successful a new process for dispersing asphalt tar spots is working out, so more waste paper can be re-used and upgraded in quality.

In this process, an American Defibrator machine and a cooking stage are used and one installation known to be working successfully is in a Wisconsin board mill, according to reports to PULP & PAPER.

Mr. Kumler also told of new alkali

dispersible paper taping and alkali-dispersible book binding adhesives, which make more waste paper reuse possible. The tide against waste paper may have been turned, despite use of more resins, wet and dry strength additives, etc.

**MYSTERIES OF SLIME**—Confusing conditions and problems in slime control were discussed by J. R. Sanborn, National Aluminate Corp.'s paper process technical director. He said steps should be taken in winter to prevent slimes and mixed deposits that become troublesome in summer. Preventive programs should also be applied in the fall. Selected surface active materials, with superior dispersing properties and definite slimicide activity, are being used to advantage in preventive control. Mills have reported numerous benefits from these programs, he said.

Carton plant spoilage, if only 3%, is still a loss of several hundred thousand dollars in some mills, said Fred Barber, of Gardner Board & Carton.

Board laminating was described and shown in pictures by R. S. Haven of Dilts division of Black-Clawson. He showed adhesive applicators and press or combining sections, noting their

importance, and increasing requirements of high speed processing.

**MORE MECHANICAL DRIVE TURBINES**—In the engineering session, R. N. Miller talked about mechanical drive turbines, pointing out how more power and greater steam pressures are required. There is a big increase in number of such turbines in use. New selective speed control equipment is available.

**MACHINE SESSION LASTS LATE**—A paper machine session lasted until close to 7 p.m., showing the keen interest.

Alexander Jenkins Jr., of Bird Machine Co., reported that 75 of the new Swedish-developed Vibrator screens are now in use in America, handling virtually every type of furnish. These compact, high density screens keep costs down, quality up, he said. He gave production figures for different applications. Part of his talk was devoted to Jonsson screens, for knotting ahead of brown stock washing, or on other pulp, for bull screening and coarse screening of building board. They are virtually standard equipment ahead of strawboard machines, he said.

## Don Estebo Wins \$1,000 Bolton Award

Donald G. Estebo, division engineer for the Wheelwright division of The Mead Corp., Leominster, Mass., where he went from Chillicothe, O., central engineering, is the 1955 winner of the John W. Bolton & Sons, Inc., national pulp and paper industry essay contest.

He was presented with \$1,000 by John Gaines Bolton, president of the Lawrence, Mass., firm, for his composition contest subject, "The Value of Better Mill Communications."

Second prize—\$750—went to Dr. Wilfred Galley, research director of The E. B. Eddy Co., Hull, Que. Third prize—highest ever won by a woman in the contest—was captured by Mrs.

Vera W. Berney, women's personnel director, Crown Zellerbach Corp., Camas, Wash. She received \$500.

Divisional winners: Mrs. Mary Oviolt, St. Regis, Kalamazoo; Wm. C. Holmes, Strathmore Paper, W. Springfield, Mass.; Wm. S. McCain, International Paper, Mobile; Elroy Steinmetz, Kimberly-Clark, Neenah, Wis.; A.L.M. Bixler, Riegel Paper, Riegelsville, N.J.; Norman Bernard, I.P., Christolm, Me.; W. G. Nettleton, Canadian I.P., Gatineau, Que.; H. P. Carruth, Jr., Mead, Chillicothe, O.; Robt. L. Parks, Puget Sound Pulp, Bellingham, Wash.; Wm. H. Warren, Halifax Paper Roanoke Rapids, N.C.



**MRS. VERA BERNEY**, first woman to finish so high, won 3rd prize and \$500 in the Bolton essay contest for 1955. She is Women's Personnel Director of the Crown Z. Mill at Camas, Wash. In picture, left to right: **GEORGE H. CALLAWAY**, Res. Mgr. at Camas; **MRS. BERNEY** and **JOHN GAINES BOLTON**, President of Bolton firm, who flew to the Pacific Coast to make the award to her at a luncheon in her honor.

## HOW EXPANDERS SAVE FELTS—

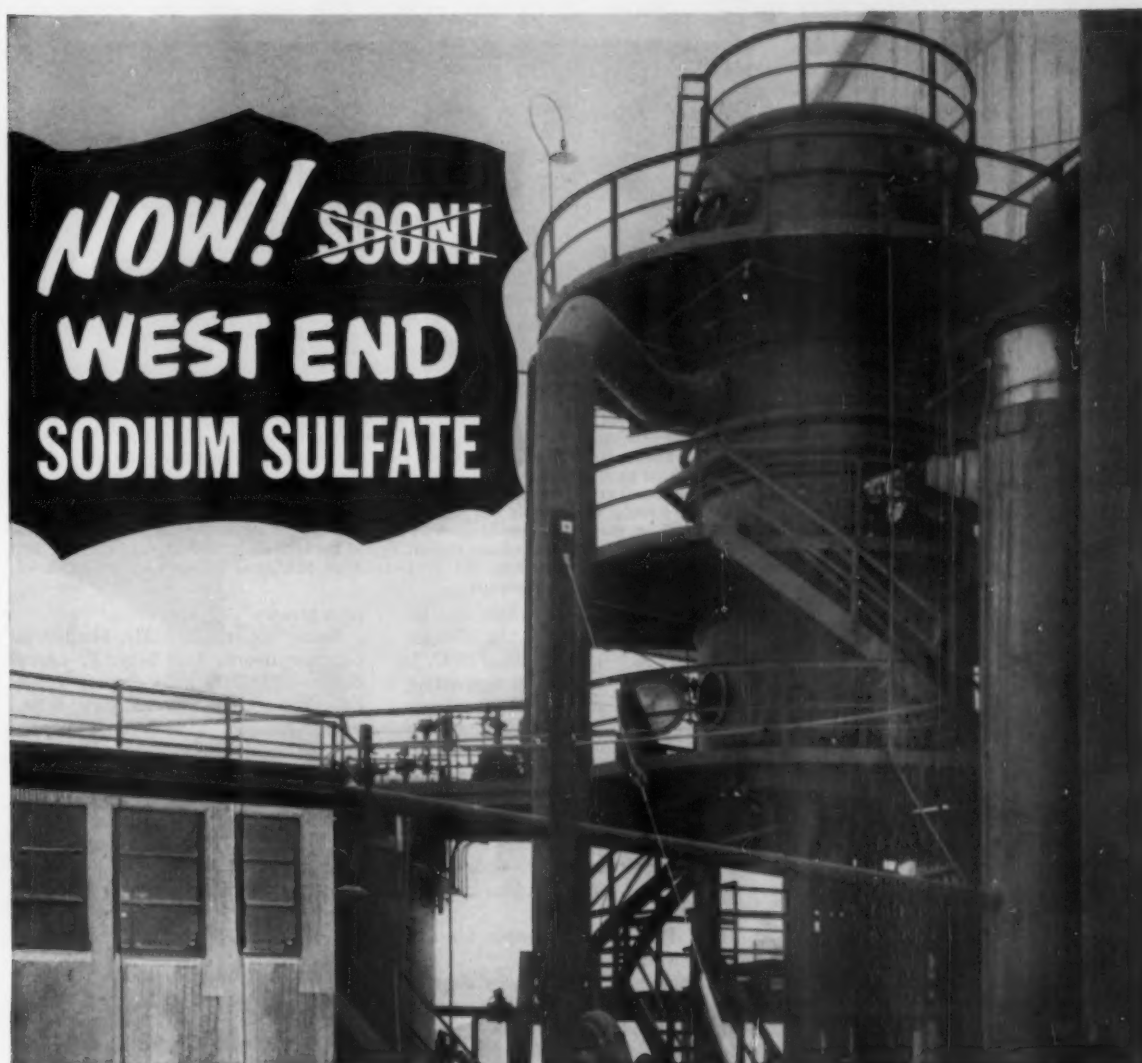
Walter P. Murray, in charge of technical sales, Mt. Hope Machinery Co., told of applications of its expanders in the effective handling and cleaning of felts. He gave favorable reports on wet felt life in 7 mills as a result of using the expander units. Some mills were able to purchase narrower felts. In one mill, 3 expanders were used in a row on a felt, so arranged to give "a gentle but controlled out, in and out again action," dislodging imbedded stock. The felt comes off the last expander stretched to width, and with straight seam, weave square and open, dirt and stock loose.

## QUIT GUESSING ABOUT PERSONNEL—

In the final day's industrial relations session, Richard Warner of Mead Corp. emphasized values of new personnel testing and research methods. The old ways of unproven guess-work and assumptions can be more costly than sound personnel research and effective use of manpower, he said.

Robert Miles, a national prize winner in the John W. Bolton & Sons national pulp and paper industry essay contest in 1954 and an industrial relations executive at Gardner Board, contrasted a "high producing" supervisor who "spends his time planning, organizing and supervising," and a "low producing" one who "spends his





## **New Plant now in production taps natural source of sodium sulfate**

West End Chemical Company now is producing Salt Cake and Anhydrous Sodium Sulfate at the rate of approximately 50,000 tons annually. These new products maintain the *premium quality* which has

characterized West End Soda Ash and Borax for over 30 years. We proudly add Salt Cake and Anhydrous Sodium Sulfate to the list of industrial chemicals carrying the well-known West End brand.



*West End will be pleased to submit samples, prices and freight schedules for your evaluation upon receipt of your inquiry. We request that you include any applicable specifications governing your requirements for these products.*

### **West End Chemical Co.**

Executive Offices: Nineteen Fifty-Six Webster Bldg., Oakland 12, California • Plant: Westend, California



time doing the same work as his employees."

#### WHAT GOOD SUPERVISOR DOES

—A good supervisor, he said: (1) Permits his staff to show initiative; (2) Sets up methods of reward and punishment; (3) Sees that materials and equipment are ready to be used; (4) Shows sincere personal interest in his crews; (5) Trains his people for better jobs; (6) Takes the time to show why mistakes are made; (7) Recognizes a dual loyalty—to employees as well as management; (8) Makes records and reports useful tools.

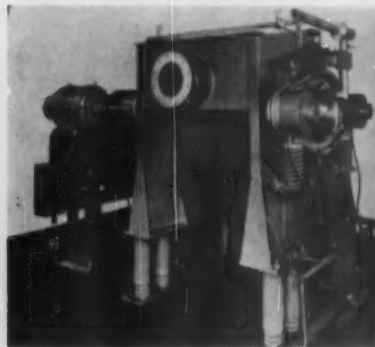
Dr. E. G. Meiter, Employees Mutuals of Wausau, Wis., discussed noise problems. He said the medical aspects of mill noises are not fully understood. He said it was damaging to hearing, interferes with speech communication and may become a safety problem, but he did not come up with any new solutions that were not already known. He recommended ear-muffs, now an old remedy, but not satisfactory to most modern mills.

### Mill Problems Aired

#### From 'Marginal Mill' To Too Talkative Peddler

On the final day of the Superintendents' National at Cincy, the Harry Hadley administration put on a round-table discussion that shows promise of developing into something important in the future.

Harry Weston, ex-editor-teacher-mill supply "peddler" of the pulp and paper industry, and now the human "reactor" of the AP&PMSA "atomic works," was a well-versed chairman for such a big subject as "Q's and A's to problems of immediate importance to mill executives."



#### "Talked About" Equipment at Cincinnati

Bird Machine Co.'s compact Vibrotor screen (left) operates with bleached sulfite and de-ink stock at consistencies as high as 2.2% or even higher, said ALEX JENKINS JR. He reported 75 Vibrotors are now operating in N.S.A.

Mt. Hope Machinery's Expander (right) is doing a good job cleaning and stretching, opening and squaring weaves, of felts, extending their life, said WALT MURRAY, Technical Sales Rep for that company.



#### Rolled Out Welcome Mat When Supts. Came to Cincinnati

OHIO KNIFE CO., one of Cincinnati's major industries, was host to many members and guests of National Superintendents Convention. Here is President JOHN B. RANDOLPH and a few of his Sales Staff who specialize in knives for pulp and paper operations. (l to r): ROSCOE BROOK, JR., Montgomery, Ala., a Dallas-born veteran of touring Southern p and p mills for over 15 years; RAY LINZ, born in Mississippi, but now serving Ohio mills out of Cincy; HUBERT D. McDONALD, of Chicago, a "regular" on the Wisconsin-Minnesota mill circuit; PRES. RANDOLPH, Cincinnati-born, a Yale graduate and whose staffers say is their hardest working associate of all, and JOHN CATES, traveling out of Detroit to Michigan industry, a graduate of Chrysler Institute of Technology.

That could take in a whale of a lot of territory—and so it did. Mr. Weston, with Prexy A. W. "Army" Plier of D. J. Murray Mfg. Co., ably supporting him on the rostrum, pulled some "red-hot" prepared questions figuratively out of his hat.

For instance—"What must the so-called "marginal mills" with slow machines and high costs do, to keep from going under?"

Answers from the floor—Find money for research; get into specialties.

How do you train people for the future push-button mill?

An answer—"Build dummy control panels to train the handful of people who must know the operation—as they did at Hammermill for their Neutracer plant."

Another—"Automatic equipment won't answer everything. We must train a man to think on his feet in

emergencies."

Some "supers" like Mr. Hadley of Gardner Board; Mill Mgr. F. Leroy Zellers of Chillicothe Paper; Chief Engineer Harold Suhs of Sorg; Supt. Joe Kubicka of John Strange Paper; Mgr. Howard Wehr of Mead's Harri-man mill, etc., did a yeoman job of keeping this session "alive." The bigger the questions the less willing were many to "stick their necks out." Real action on the floor is necessary to keep this kind of session going in future conventions.

#### 630 at Cincinnati; Records of Past Years

Registration of the National Superintendents Convention at Cincinnati totalled 630, consistent with the average for the past decade.

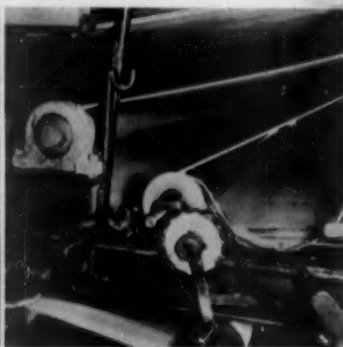
These 630 comprised 514 men (from mills and supply companies and other guests) and 116 wives, and included a scattering of daughters.

Here's the registration record of Nationals for the Superintendents for recent years:

1935—Cincinnati	630
1934—Montreal	640
1933—Atlanta, Ga.	605
1932—Detroit, Mich.	570
1931—Portland, Ore.	888*
1930—Chicago, Ill.	660
1949—Atlantic City, N. J.	600
1948—New Orleans, La.	624
1947—Chicago	600

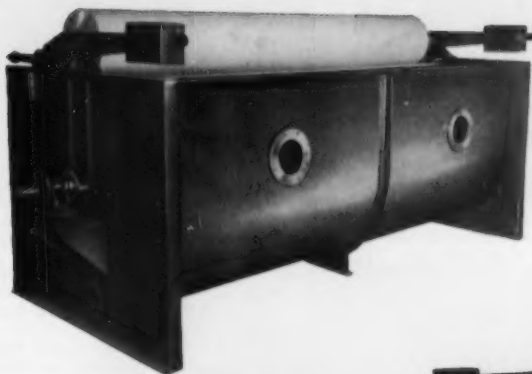
\* All-time record for conventions beginning with the first, in Chicago in 1919. Over 1,000 came to final dinner-dance in Portland. Some of above figures (1949 and 1947) were estimates.

Next year's site—Lake Placid, N. Y., June 12-14. Site for 1957—Boston.



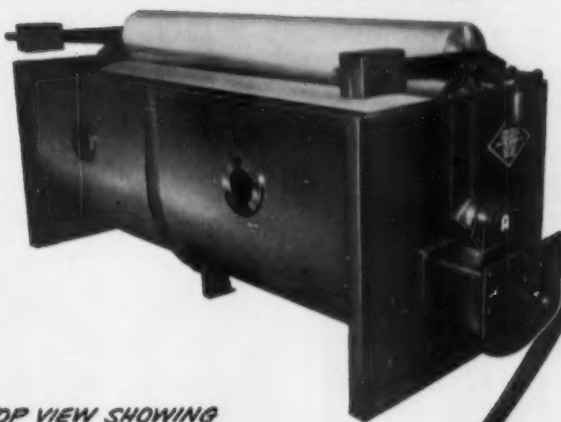


**ANY WAY YOU LOOK AT IT...**



*VIEW OF END  
AND INTAKE SIDE  
OF COWAN DECKER*

*VIEW OF EFFLUENT  
DISCHARGE END FROM  
INTAKE SIDE*



*TOP VIEW SHOWING  
RUBBER-COVERED  
COUCH ROLL AND 48" DIA. —  
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**...the Cowan Decker  
shows its superiority!**

**COWAN DECKER PRODUCTION FIGURES:**

35 tons/day — Groundwood  
85 tons/day — Sulphite  
100 tons/day — Kraft



Exclusive U.S. licensee for Cowan Deckers



## PULP & PAPER'S PICTURE NEWS OF THE INDUSTRY



### New Posts for These Two, Known in Both U.S., Canada

**DON McLAURIN**, (left) resigned as Chief of Pulping Group, Institute of Paper Chemistry, to become Technical Director, Gilbert Paper Co., Menasha, Wis. He will continue to live on Little Lake Butte des Morts, nearby. At Institute he was succeeded by Mr. Malcolm May, from Champion Paper, Texas. Mr. McLaurin was born in Revelstoke, B.C., attended U. of Washington and Institute and was Technical Director of Powell River Co. and Control Supt. at Kimberly-Clark operations in Kapuskasing, Ont., before returning to the Institute.

**WALTER W. HOLLAND**, (right) new Vice President, Pulp, for British Columbia Forest Products Inc., planning a new \$25,000,000 market pulp mill at Crofton, B.C. A native of Canada, he has been Res. Mgr. of the Oxford mill in Rumford, Me. He has been in the industry 30 years, holding various posts in Canada, including Gen. Supt. at Baie Comeau, Que.



### Amacher Heads Starch Sales; Schnorbach Joins Robt. Gair

**RICHARD F. AMACHER** (left), takes over as new Manager of Sales, Bulk Corn Products Dept., in Anheuser-Busch, Inc., major supplier of starches and dextrans to the paper industry, St. Louis, Mo. Announcement of Mr. Amacher's appointment was made by **ARTHUR E. WEBER**, Vice Pres. in charge of Sales, Yeast, Malt & Corn Products Division of the famed "Budweiser" industry. Mr. Amacher is promoted from heading these sales in the east out of New York City. **WILLIAM L. SCHNORBACH** (right), former Technical and Engineering Mgr. at the American Box Board Co. mill in Filer City, Mich., originally built by his father in 1915, is Asst. to Vice Pres. C. S. (BILL) HEUSTIS, Director of Development, Chemical and Paper Products, Robert Gair Co. Inc. Gair is embarking on expansion similar to that carried out in recent years at Filer City. Mr. Schnorbach is a Univ. of Michigan graduate, ch. e., 1937, and has been at Filer City ever since until this year, except 4 years as wartime Air Force pilot.



### Changes in Hooker Company; Klausen Is New President

Left to right: **BJARNE KLAUSSEN**, former Exec. V.P., is new President of Hooker Electrochemical Co. Born in Norway in 1891, he graduated from University of Oslo in 1916 and joined Hooker as a Research Chemist that same year. He was Niagara Falls Works Mgr. by 1941, a Director in 1942 and V.P. of Production in 1947. An American citizen since 1926, he has, however, been Norwegian Vice Consul many years.

**R. LINDLEY MURRAY** (middle), is new Board Chairman, succeeding E. R. Bartlett, retired. Mr. Murray, born in San Francisco in 1892, graduated from Stanford with honors and was National Singles Tennis Champion in 1917 and 1918. He also joined Hooker in 1916 as Research Chemical Engineer. He had been President the past 4 years.

**THOMAS H. TRIMBLE**, new Mgr. of Public Relations for Hooker. He came to the company in 1935 from Princeton U., formerly the P.R. Dept. under direction of Vice Pres. R. Wolcott Hooker.

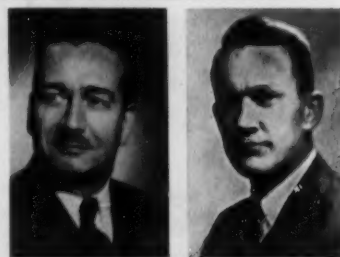


### Beck Joins Ciba;

#### Bristol Promotes Nuber

**HERBERT W. BECK** (left), is now Asst. to Gen. Mgr. of Ciba Co. Inc., 627 Greenwich St., New York City, manufacturers of dyestuffs and chemicals for pulp and paper and other industries. From 1947 to date, he was active in sales and service to Pacific Northwest mills, out of Portland, Ore., for six years as Resident Mgr. of another dyestuff firm and for over a year as Sales Mgr. of equipment firm. He was born in New York City, in 1910, and graduated from Brooklyn Polytechnic Institute.

**ERNEST NUBER** (right) is new General Field Sales Mgr. for The Bristol Co., according to Harry E. Beane, Vice Pres. in charge of Sales. Mr. Nuber joined Bristol in 1929. He was made Pacific Coast Manager in 1934 and was later brought to Waterbury, Conn., to become Export Mgr. In 1948 he was made Mgr. of Application Engineering and in 1954, Sales Mgr. Born in Brooklyn, N. Y., he studied at Brooklyn Polytechnic Institute.



### Elected New President Of Brown Co., Pennsalt

**A. E. HAROLD FAIR**, (left) new President of Brown Co., Berlin, N.H., succeeding Lawrence F. Whittemore, who becomes Board Chairman. Mr. Fair had been Executive Vice Pres. since Oct. 1954. Before then he was Pres. of Alliance Paper Mills Ltd. and Don Valley Paper Co. Ltd. for 7 years, and a Director of their parent firm, Howard Smith Paper Mills, for 5 years.

**WILLIAM P. DRAKE** (right), new President of Pennsylvania Salt Mfg. Co., Philadelphia. At 42, he is Pennsalt's youngest top executive in its 105 years, succeeding Geo. B. Betzel, who continues as Director and Chairman of Pennsalt International. Mr. Drake joined Pennsalt while a Bowdoin College undergraduate. He headed chemical specialties, then all sales, then was Gen. Mgr. of Chemicals Division, and in Feb. 1955 became Exec. Vice Pres. and Director.



### Father, Son Serve P&P Industry

**HARRY J. HIGGINS** (left) is new Sales Manager of Portland Copper & Tank Works, Inc., So. Portland, Me., one of the nation's leading fabricators of stainless steel and super alloys. He joined the firm in 1954 as Sales Engineer. In his new position, he will coordinate the operations of sales personnel in several industries including pulp and paper, for which Portland fabricates pipes and fittings. Before joining Portland Copper & Tank, he served as Chief Engineer, Representing the Maine Governor, Executive Department, Industrial Mobilization Division, from 1951-1954.

**RAYMOND H. HIGGINS** (right), his son, has been appointed Sales Engineer for Portland Copper and Tank. Both announcements were by Gen. Mgr. Harmon Hugo. The son has been with Portland Copper & Tank since 1954, will concentrate on service to the pulp and paper industry. He was Project Engineer, 1952-54, for Great Northern Paper Co., Millinocket, Me. He served in U.S. Air Force in European operations in WW II.



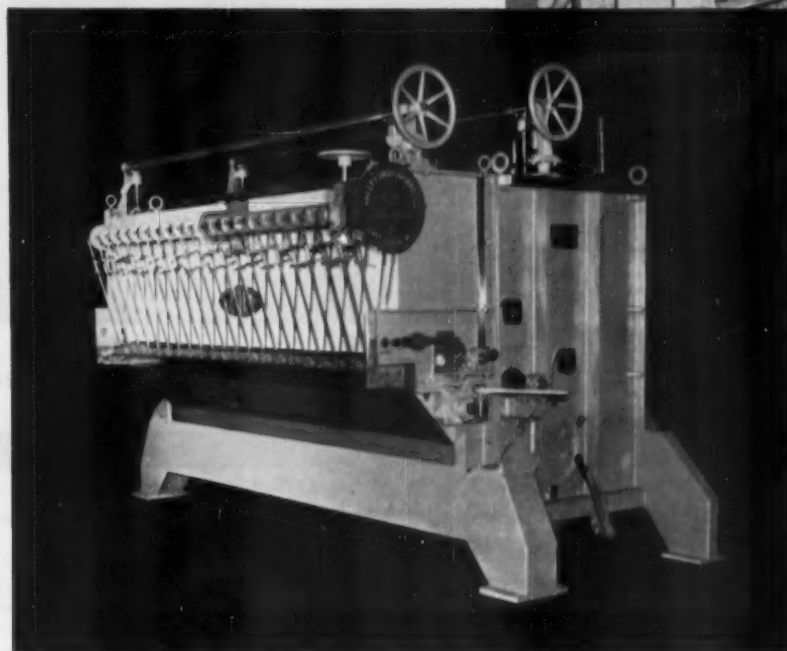
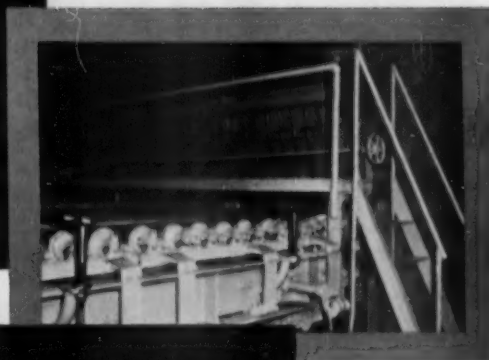
**COLUMBIA RIVER  
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**New Increased Power**

# **INTERNATIONAL TD-18A**

**Now with 103**

**Drawbar HP**



LOOK AT THAT LOAD as operator applies 103-drawbar hp of new TD-18A. Steering is effortless with new hydraulic finger-tip controls and positive, self-energizing brakes.

**NEW Power . . . New gearing . . . New ruggedness**  
—for greater production

**NEW Track Frames . . . 300 per cent stronger**

**NEW Finger-Tip Power Steering . . . advanced**  
hydraulic design

Here's the crawler tractor with everything contractors need to meet increased competition—increased work-power, increased ease of operation, increased durability:

The improved INTERNATIONAL TD-18A, now with 103-drawbar horsepower at 24,300 lbs. maximum drawbar pull in first gear at rated rpm.

Double check all these great new TD-18A features—right here on this page—on your job where you can

**NEW Operator Compartment . . . comfortable**  
driver's seat—easy-to-reach controls

**NEW Track Roller Oil Seals . . . 500-hour period**  
between lubrications

**NEW Positive Self-Energizing Brakes, 13% more**  
effective brake area

**NEW Appearance . . . sleek grille, heavy fenders,**  
75-gallon fuel tank. Better visibility . . . control-tower view front and rear

take over the controls and appraise their value in extra work done for lower cost. Your INTERNATIONAL Industrial Power Distributor will arrange your own personal shake-down test of the TD-18A any time you say.

INTERNATIONAL HARVESTER COMPANY, CHICAGO 1, ILLINOIS



**INTERNATIONAL**  
**INDUSTRIAL POWER**

**MAKES EVERY LOAD A PAYLOAD**



**Yardster Does a Big Job**

Transferring pulpwood with Taylor Machine Works "Yardster" mounted on GMC-350 at Fordyce yard of Holmes & Parham Pulpwood Co. Yardster has handled 18 to 20 thousand cords.

**Good Wood for Pulp**

SIDNEY R. HOLMES, Fordyce dealer (left), and REX CAREY, International Paper's area procurement man, illustrate types of inferior pine trees advantageously sold as pulpwood.

## How "Wonder State" Dealers Operate

**PULP & PAPER becomes an "Arkansas Traveler" to visit yards and dealers serving International Paper Co.**

• Definitely proven untrue was the saying of years back that paper mills would "cut out" Southern forests. This is the opinion of Sidney R. Holmes, Fordyce (Ark.) pulpwood dealer who says he can see 30% more "stems" growing on the land than when he started in the woods 17 years ago.

Son of "Old Rosin Billy," who was first in lumber before joining International Paper Co. as a woods superintendent, Mr. Holmes sidestepped a parental opposition to employing family by going to J. E. McCaffrey (now I.P.Co. vice president) for a job. "Hell, yes," was the fast response. So Mr. Holmes started marking timber for selective cutting in the Hampton district (Ark.). He was assisting the wood procurement superintendent when he went out on his own as a dealer, 8 years ago.

Located in the center of Fordyce, on a principal highway route and just across rail tracks from the St. Louis Southwestern ("Cotton Belt") Railway station, Holmes & Parham Pulpwood Co. enjoy almost perfect switching service. There is a rapid turnover of wood in the yard, which measures 134 ft. front by 250 ft. depth, with a 5-rail car capacity spur

track. Gravel provides a good surfacing, with a modern office completing the installation.

Pulpwood is transferred from trucks (or other vehicles) to rack cars with a Taylor Machine Works Yardster, mounted on a GMC-350 unit. Although this machine has handled 23,700 cords in one year it still looks quite good. The yard handles 500 cords per week.

Graydon Parham was engaged in the lumber industry before joining Mr. Holmes in 1954. They are married to sisters. Mr. Parham joined the enterprise when it was being expanded. Mill pulpwood demands vary during the year, depending upon whether reserve is being increased or diminished, but in the main Holmes & Parham ship 800 to 1000 cords weekly from Fordyce, a yard at Manning, and to mill yards by truck. Some loading is effected at other points.

**HOW TREE STANDS INCREASE—**Enthusiastic about tree growth and results of good management in Arkansas, Mr. Holmes cited a 12-acre plantation planted in 1939-40 from which 72 cords were taken but two-thirds of the wood left. Seed tree cutting

was forced by the war but a dense stand of 15-ft. to 20-ft. young stands is found where harvesting was done in 1946. Where the company has killed cull hardwoods, pine is coming back in solid stands. The fire situation is better than in 1940 and the outlook good with clear cutting only when owners insist.

Pulpwood dealers, said Mr. Holmes, must produce quality wood for the mills if they expect to continue to enjoy good business.

A consistent reader of PULP & PAPER for years, he says it is apparent that quality demands are increasing, which means good wood to make good paper, so that the mill can stand up in competition and continue to provide volume outlet for the dealer.

**ANOTHER PULPWOOD YARD STORY—**Thrift takes many forms, but L. J. Massey, who operates a standard type rail yard at Gurdon, Ark., installed a butane gas tank on his Taylor Pulpwood Yardster because he got tired of buying new padlocks for his gasoline supply tank. Incidentally, the butane costs less and burns cleaner than gasoline, so the installation is



## PULPWOOD SECTION



### Point to Their Arkansas Balliwick

JAKE JOHNSTON, yard manager (left), and GRAYDON PARHAM, partner, indicate dealer's territory marked on map.



### Thrift Takes Many Forms

H. D. CHILDERS, yard manager for L. J. Massey at Gurdon, Ark., points to butane gas tank installed on Taylor Yardster.



### Proud of This Tract

GEO. LARY, experienced graduate forester, is proud of this demonstration of good management cutting 30-acre tract calculated to yield \$13.50 per acre/year.



### Wood, But Not Pulpwood

"Rogues' Gallery" at IP Pine Bluff yard exhibits unwanted pulpwood types. Hard (safety) hats are worn by GEO. LARY, Dealer (left), and L. E. FISHER, Yard Manager.



### Speedy Crane in Action

Lorain D-315 crane (Thew Shovel Co.) unloads pulpwood from truck to rr rack car in matter of minutes. Fast turnaround gives producer one or more truck loads daily.



### Pats End Smooth

After transferring pulpwood to rr rack car, Lorain D-315 is used to pick up heavy made-up slab to pat ends smooth. Finished car conformed to ICC stipulations on clearances.



self-paying, making padlock savings all profit. Pulpwood in reserve in this yard is strapped. H. D. Childers runs the yard. Mr. Massey's operation also includes a concentration yard at Willisville. Pulpwood is trucked from here to the Camden mill with Evans-Busch special 8-cord trailers.

Trends of the past decade point to the pulpwood dealer as a leader in his community. He usually has many years' practical experience in forest products field. He may be a graduate forester. At Pine Bluff, Ark., George A. Lary, who sells pulpwood to International Paper Co. as a dealer, is a graduate forester with experience, too.

This has proven in good stead in such cooperative projects as announced by a sign saying the Jefferson County Soil Conservation District cooperated in a 30-acre project in 1953. This was marked for saw timber and pulpwood; yielded 1400 feet BM of pine at \$30/M, 300 feet BM of hardwood at \$10/m, and 2-cords pulpwood at \$3/cord or a total of \$51.00 per acre. For the future, profitable returns can be expected from 5-year spaced cuttings.

This demonstration area is not far from Mr. Lary's office where he has a Taylor Yardster for unloading trucks for temporary storage. This pulpwood is strapped into bundles. Much pulpwood in the South is now wrapped with Signode Steel strapping.

**I. P. HAS WELL-EQUIPPED YARD**—Located on Princeton Pike, on Pine Bluff's outskirts, International Paper Co. has one of its typical well equipped yards. There is the gravel surfaced area for all-weather operation, the rail spur set for loading from either side. The Lorain SP-254 crane transfers wood from a producers truck to either side of the rail car. Adjoining the yard office, there is a rack of typical pieces of pulpwood not meeting specifications, literally, a "Rogues' Gallery."

Graduate from U. of Maine in 1927, Mr. Lary came to Ozark National Forest (Ark.) with U. S. Forest Service (1932) and then joined the Arkansas state organization in 1936.

Eight years ago he left the post of assistant state forester i/c fire protection to become a dealer. The area from which he buys wood extends about 70 miles north and south by 35 miles east and west. From this area he receives wood from about 66 regular producers at Rison, Sheridan, and Pine Bluff. At Rison, a company yard also buys wood from Mr. Lary.

Wood is brought to the yard in all types of vehicles but mostly by truck except in bad weather they use wagons to bring it to the roadside for loading.

## How St. Regis Sets Up Alberta Program

● Plans for organizing the pulpwood supply for North Western Pulp & Power Co., backed by St. Regis Paper Co., which is building a 400-ton bleached sulfate pulp mill at Hinton, Alberta, are being pushed ahead rapidly. Substantial mobilization of equipment has already been carried out under direction of H. V. Hart, general woodlands manager, northern division, St. Regis.

After establishing an office at Hinton, Mr. Hart conferred in Edmonton with Gordon D. McNab, resident woodlands manager, formerly with Marathon Paper Mills in Ontario.

Before producing pulpwood, extensive surveys are being made and aerial as well as ground reconnaissance is being done. Ultimate plans call for production of 300,000 cords of wood yearly from a timber concession acquired from the Alberta government.

Experimental cutting may be undertaken this year on a small scale, but activity in the woods will be greatly expanded in 1956. A forestry staff for the Hinton office is now being organized.

**PROVINCE MAKERS SURVEY**—The Alberta government is instituting a forest management program roughly similar to that adopted in British Columbia several years ago,

and since May 24 some 24 survey parties have been in the field gathering information for a province-wide forest survey, supplementing an inventory initiated in 1949.

Data obtained from the Photographic Survey Corp. is being used in the form of map sheets and volume statistics for management plans and administration. Provision is also being made for more thorough fire protection, and incidentally North Western Pulp is making its own plans in this connection to be integrated with those of the government forest service.

If sustained yield is to be achieved, forest fire losses must be reduced to a minimum, and the forest management licenses to be issued will be based on the conception that cutting and fire and other losses will not exceed annual growth.

Mature and over-mature stands will be cut, to be replaced by young stands of suitable species which will produce more rapidly and with more volume. Growth of immature stands will be improved by removing the excess trees while the percentage of coniferous trees in mixed and deciduous stands will be increased.

The government's program is independent of the work being done by North Western Pulp, although the latter will cooperate fully.

## Schenck's Death Recalls Warning To U.S.

Dr. Carl Alvin Schenck, world-famed forester and founder of the first forestry school in America, the Biltmore Forest School at Asheville, N. C., died May 15 at his home in Lindens, West Germany. He was 87.

On his last trip to America in 1951, Dr. Schenck, in an interview with PULP & PAPER, predicted that German forests were depleted so badly in the war, and since, "that there is absolutely no salvation for them, or hope for their return as an important resource."

However, he did foresee the increasing use of hardwoods species in Germany, including the despised beech tree, now used to make dissolving pulp. This is borne out in the sections on West Germany and East Germany appearing in PULP & PAPER's World Review Number for 1955, just off the press.

Even after the war, Dr. Schenck said German forests were being further decimated, as wood was substituted for coal for fuel, and the Ger-

man industries lacked exchange to import wood requirements.

During his tour of America in 1951, Dr. Schenck lunched with Capt. Miller Freeman, president of Miller Freeman Publications, publisher of PULP & PAPER, and they reminisced about early forest practices and both recalled their associations with Gifford Pinchot, founder of the U. S. Forest Service. Members of PULP & PAPER and THE LUMBERMAN staffs also lunched with him.

On that trip he counseled against rigid cutting and planting rules. "Every patch of woodland should be treated according to its own merits," he said.

He warned that U. S. foresters "have a lesson to learn regarding access roads, for these would make vast forests more accessible for beneficial cutting and protection against fires and insects and disease."

Tree Farms near Orrick, Calif., and Coos Bay, Ore., were both renamed in his honor on that trip.





#### Initiates Forest Genetics in Minnesota

Just a starter, is Blandin Foundation's \$5,000-a-year for forest genetics studies by University of Minnesota. Several Minnesota forest industries are expected to participate. L to r: C. L. COLE, Supt. of North Central Experiment Station at Grand Rapids, Minn.; CHARLES K. BLANDIN, 82-year-old President of Blandin Paper Co., and FRANK KAUFERT, head of Minnesota's Forestry School, look over Blandin agreement to support project.

### If There's Anything to Forest Genetics—

Charles K. Blandin, 82-year-old president of Blandin Paper Co., and his associates, want to know about it.

● Charles Kenneth Blandin, who founded Blandin Paper Co. 37 years ago and is still its president, isn't letting anyone get ahead of him with new ideas for advancement of the pulp and paper industry.

If forest genetics can improve the rate of growth, density, fiber quality and resistance to insects and disease of pulpwood species, then he wants to know about it. He and his associates are doing something about it, too.

The Charles K. Blandin Foundation, founded by him in 1941, is going to make substantial donations to the University of Minnesota for forest genetics research. Initial Foundation appropriation is \$5,000 annually for 5 years. Mr. Blandin and his associates view this as only "a beginning."

Forest genetics is not a new science, by any means, but this year has seen much increased activity in this field. Only tests over a long period will determine how extensive the Minnesota project will be. Other forest industries in the state are likely to take part.

Principal work will be carried out at the U. of Minnesota's North Central Farm School and Experiment Station at Grand Rapids, Minn., site of the Blandin mill. Dr. Scott S. Pauley, Harvard University, will be in charge of the entire project. Other work will

be at Cloquet and Rochester, Minn. Dr. Pauley is a U. of Minnesota graduate, took advanced work at Michigan State and earned his ph.d. at Harvard. Loyd LaMois is in charge at Grand Rapids. Over 3,000 seedlings and cuttings already have been planted on 6 acres. Representing the University of Minnesota is its forestry school head, Frank Kaufert.

Initial work in Minnesota will be with spruce and pine. Aspen, described by genetics researchers at the Institute of Paper Chemistry as especially suitable for improvement through genetics, also will be studied.

Mr. Blandin, now 82, is still taking an active though restrained role in company affairs. Carl Kirkwood (Kirk) Andrews, his associate for 42 years in newspaper and paper mill business, is executive vice president. Mr. Blandin was former owner of the St. Paul Dispatch & Pioneer Press. He bought the Grand Rapids mill when it made 25 tons a day of newsprint; now it makes 185 tons daily of A and A1 printing papers. He started his career in New London, Wis., as a "string" correspondent for newspapers; later was a circulation solicitor in Minneapolis.

The Blandin Foundation is an unusual institution—draws income from the paper mill, spends it on commu-

nity and other general welfare projects, some benefiting the entire state. Ten trustees include Mr. Blandin, Mr. Andrews, C. H. Schacker, secretary of the paper company, and other business and community associates.

#### Says Southern Pine Will Grow in West, Hemlock in South

Rayonier Inc. recently gave thousands of packets of hemlock seeds from Washington state to Floridians and Georgians, and earlier it had given, thousands of packets of Southern slash pine seeds to Washington staters.

In both cases, Rayonier foresters said the non-native trees should grow well in their new homes. They said Southern pine should grow in the wet Pacific Northwest, and Western hemlock should grow in the Southwest "provided it receives sufficient moisture."

#### New Equipment Listed

##### For Logging

Electric Steel Foundry Co., 2167 N. W. 25th Portland, Ore., recently published a two-color 28-page catalog listing its complete line of Esco rigging and wire rope fittings for logging and pulpwood handling. This line—specified as the original cast manganese steel equipment designed for in-woods uses—covers tractor and highlead logging, loading and road construction gear. Because of its extreme wear resistance, high strength, ability to absorb shock and work-hardening characteristics, manganese steel is used in all Esco logging rigging subject to severe stresses, strains and abuse.

Featured equipment ranges from Bardon choker hooks, choker eye sockets and "Screw" guy line hooks to skid pans, rooters and log grapples.

Some included items are here catalogued for the first time. Among these are the following: Wedge type choker sockets with which a choker can be fitted in the woods in a fraction of time required to form an eye splice; Nelson "Screw" butt chain for safe, fast highlead yarding; dwarf end-loading hooks; and grapples for efficient log loading, reloading and decking.

#### WOODLANDS AND PULPWOOD PRODUCTION EXECUTIVES—OTHER FOLLOWERS OF THIS PULPWOOD SECTION—

Read our story on the Pulp-Paper Supts. Assn. Convention in this issue for James Holekamp's forecast in changes in Southern pulp mill supply; J. B. Millar's discussion of what Kimberly-Clark seeks to achieve in forest, other reports on chemical debarking, etc.



## The Favorite of Thousands of Professional Woodcutters

With a Homelite Model 17 you cut 18 inch trees in as little as 18 seconds . . . you bring down trees 4 feet or more in diameter quickly. You make every type of cut easily. Yes, and your Homelite will cut in any position . . . left, right, up, down and upside down . . . without carburetor adjustment or loss of power.



**3.5** **hp** BRAKE\*  
**22 pounds**

\*actual dynamometer rated brake horsepower

Don't let the very light weight of a Homelite Model 17 chain saw fool you. This fast-cutting 22 pounder is a real production saw . . . one that will stand up in the woods under steady commercial cutting. That's the only type of saw Homelite makes . . . a rugged high-production saw that needs a minimum of maintenance. With this dependability, combined with 3.5 horsepower packed in a saw that weighs only 22 pounds, it's easy to see why the Homelite Model 17 is the favorite of thousands of professional woodcutters.

PERFORMANCE • DEPENDABILITY  
**HOMELITE**  
CORPORATION

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Canadian Distributors: Terry Machinery Co., Ltd., Toronto, Montreal, Vancouver, Ottawa



## What a Southern "Area" Meeting Discusses

"Rain-Making" is a misnomer, but the practice is spreading fast; improving small operations is hard task

● Tree marking and free management guidance for small woodland owners was predominantly featured in a recent Area 1, meeting of The Southern Pulpwood Conservation Assn. at Shreveport, La. An interesting contribution on "weather modification," commonly but erroneously referred to as "rain-making," added to the program.

Accomplishments have carried the association well beyond its early stages so now there are area meetings in four locations, comparable in every respect to the annual Atlanta session, with heavy attendance by pulpwood dealers. They range from 150 to 200 in attendance, with Shreveport hitting 172. Other meetings this year were at Savannah, Pensacola, Fla., and Nags Head, N.C.

Dovetailing of several agencies' work is effectuated in the tremendous task of inducing thousands of Southern small land owners to accept and practice good woodland management. Impressive was the earnestness of the various efforts, magnitude of the composite task, and costs involved.

Keynoting was by Clarence G. Snyder, International Paper Co.'s Camden (Ark.) wood procurement manager, area chairman. Good management of small owner tracts, he said, is economically vital to the community. Progress, he illustrated by saying that since 1951 pine seedling acreage set out amounted to 87,000 acres in Texas, 80,000 acres in Arkansas, and 272,000 acres in Louisiana, a total of 439,000 acres. Marked trees provided 1½ million cords of pulpwood.

Years of "doing" accomplished by SPCA as told by Henry Malsberger, its forester-manager, have brought it ber mills from undesirable to desirable to the "talking" stage, so a special staff member has been engaged for that purpose. The association reported a 6% shift in cutting practices of membership during the past two years. Mr. Malsberger said the Southeast experienced its worst fire season in 30 years in acreage burned.

**DARK OUTLOOK FOR SMALL OWNERS**—None too rosy was the



**At Southern Pulpwood Conservation Meeting**

(L to r): BOB HARRELL, left, recently added SPCA publicity man, was introduced by HENRY MALSBERGER, right, Forester-Manager. DOUGLAS CRAIG, U.S. Forest Service, Atlanta, a program speaker, and C. G. Snyder, I.P., Camden, Ark., (right) who presided. J. N. SHOPTAW, Arkansas pulpwood dealer, (left) and Ben Meadows, Jackson, Miss., forester (right). Both program speakers.



**More Southern Conservation Meeting Scenes**

(L to r): JOHN L. DISANTO, who explained how treatment of clouds with silver iodide causes precipitation. R. E. LESLIE, Springhill, La. (left) and CHRISTY E. ROBERTS, Bastrop, La., (right), who with CLARENCE G. SNYDER (meeting chairman) purchase all International Paper Co. wood for four mills west of the Mississippi river. "I CANNOT TELL A LIE", say the CACIOPPO brothers in unison, "the McCullough power saws do cut down a lot of trees. As TIMBERLAND SAW CO., 4-state distributor, the brothers (Carlos, John and Cyrus) were "social hour" hosts.

picture of small woodland owners painted by H. C. Sanders, Louisiana Extension Service director. Typical of Southern states, Louisiana has 105,489 small owners of an aggregate six million acres. As many as perhaps 20 parishes (counties) are burdened with farmers having residual income of less than \$1,000 annually. Yet in this class there exists a poor return from farm woodlot resulting from too much selling without grade or measurement and too much selling by guess.

It is impractical to carry a forest marketing service to all these small owners, either by public or private effort, since it would require 66,000 foresters. Extension service, on request, will work with the owner to mark enough trees for him to learn how. Owners who pay a nominal fee for marking service have more respect for it and follow recommendations more closely, said Fred Lang, Arkan-

sas State Forester. The Arkansas fee is 50¢ per M for pine saw logs, 25¢ per M for hardwood logs, and 10¢ per cord on pulpwood.

On small owner's land, said Jim Case, Soil Conservation specialist, his office uses a measuring stick on which are printed answers as to what's in a tree. This provides spot information without reference to tables, etc., and is most impressive. Four colored paper tabs are provided, one for each reason for marking a tree for cutting.

Dealers who employ a forester will enjoy many advantages, said J. N. Shoptaw, Arkansas pulpwood dealer, who has had one since June, 1954. The forester can help keep your producers straight on cutting practices.

**"RAIN-MAKING" SPREADS—SOME FACTS ABOUT IT**—It is "weather modification" technically, though often alluded to as "rain-making," and



# Announcing the Zephyrcranes

## A NEW complete line of advanced-design Truck-Cranes

The new Link-Belt Speeder line of truck-mounted Zephyrcranes features Speed-o-Matic — the true power-hydraulic control system. Fingertip-operated, it provides fast, easy, positive response, perfect "feel" for speed with accuracy. And because it greatly reduces operator fatigue, keeps him alert . . . you increase safety, and your operator is able to maintain greater output with less effort.

### Check these features

- **REVERSING CLUTCHES** are available for either or both main drums . . . provide power load lowering of main hoist line and jib whip line.
- **THIRD DRUM** available for HC-88, 98, 108 is particularly valuable for piling applications.
- **ALL CLUTCHES ARE INTERCHANGEABLE** (within each model) with exception of front drum reversing clutch on the HC-58 and HC-68.
- **HIGH-SPEED, INDEPENDENT BOOMHOIST** with power raising and power controlled lowering through Speed-o-Matic boomhoist and lowering clutches is standard on HC-88, HC-98 and HC-108. Available for the HC-58 and HC-68.
- **PATENTED RETRACTABLE HIGH GANTRY** is quickly raised or lowered under power. In raised position, it reduces stresses on boom and boomhoist cable. Standard except on HC-58 and HC-68.
- **FULLY CONVERTIBLE** to standard attachments.
- **REMOVABLE REAR OUTRIGGER ASSEMBLY** permits easy, quick changeover for shovel, hoe or dragline operation.
- **COUNTERWEIGHT REMOVAL DEVICE** using Speed-o-Matic hydraulic jacks, speeds removal and installation of counterweight. Available on HC-88, HC-98 and HC-108 models only.
- **HYDRAULICALLY CONTROLLED SWING BRAKE** is standard on HC-88, HC-98 and HC-108.
- **SCREW-TYPE OUTRIGGER JACKS AND PONTOONS** available.
- **TORQUE CONVERTER** power units available.

For details, contact your distributor or write

**LINK-BELT SPEEDER CORPORATION, Cedar Rapids, Iowa**

## LINK-BELT SPEEDER

*Builders of a complete line of crawler  
and rubber-tired shovel-cranes*

19,000



HC-98 Zephyrcrane with 80' boom and 20' jib works quickly, spots loads gently, accurately. Operator has clear, up-front visibility.

Five models 12½ to 35-ton capacities  
with true power-hydraulic control

HC-58	HC-68	HC-88	HC-98	HC-108
12½-ton	17½-ton	25-ton	30-ton	35-ton
	Remote control available.			



## PULPWOOD SECTION

forest lands in the millions are going under contract for assurance of normal precipitation to insure growth, restrain drought spurred disease and fire. These and other facts were divulged by John L. DiSanto, Water Resources Development Corp., Denver, Colo., who cited filling of municipal reservoirs at Dallas, Texas, and Shreveport, La., as bona fide results. In northwest and northeast Louisiana there are 3-million acres under 12 month contract at 1.6¢ per acre (yr) and negotiations in North Florida, in which paper companies are interested, a three year contract covering 5-million acres, now in negotiation, would cost 5-mills per acre year. The company can hit a 200,000 acre target, with costs at 10¢ per 12-month period.

It is recalled that Hudson Pulp & Paper Co., with mill at Palatka, Fla., estimated a \$200,000 damage by fire to 3500 to 4000 acres this past season.

"Rainmaking," as miscalled, is based on temperature drop of 3 to 5° F. for each 1000 ft. of altitude. Moisture forming a cloud will not precipitate until attaining an altitude at which low temperature, varying geographically, causes the action. Weather modification is effected by placing of generators at ground locations to introduce silver iodide in desirable cloud types. The silver iodide causes the precipitation to occur at a warmer temperature, hence rain falls without the cloud attaining normal high altitude, which might not occur.

### "Non-Sinkable" Boom Men at Weyerhaeuser Mills

Boom men at five Weyerhaeuser sawmills—including those at Everett, Wash., and Springfield, Ore., which belts chips to Weyerhaeuser Craft Mills there—are no happier about falling in their log ponds than they ever were. But they feel a lot more confident about floating now.

During wet, windy weather the men wear bright yellow rain coats and pants, with built-in life preservers. Inside each jacket are 28 air tubes and lining the pants are two king-size tubes. The combination makes it literally impossible for a man to sink, no matter how big his shoes or how heavy his clothing.

### Schild Bantam Names General Sales Manager

Schild Bantam Co., Waverly, Ia., has announced appointment of Buel M. Wallis as general sales manager. He formerly served as general sales manager of the Adams Division, Le-Tourneau-Westinghouse Co., Indianapolis.



### When Fire Was at Height

This map was published in the Chicago Tribune, showing mid-July forest fires which destroyed over 300 sq. mi., of spruce and balsam in Quebec from Bersimis River in the west almost down to Labrador. Fires threatened Baie Comeau, paper mill town, and Shelter Bay and Franquelin, small towns and pulpwood centers for the mill.

Boats stood by at Franquelin and Shelter Bay to evacuate families as the only highways out of town were cut off. At Baie Comeau, fire hoses were in readiness on the roof of the big newsprint mill of Quebec North Shore Co., and smoke and ashes swirled over the town from fires only 10 miles away in one direction, 12 miles in another.

Hundreds of men held lines against flames, with power pumps, hose, etc., one line, being 6 miles long at Shelter Bay. All woods operations were stopped several days. Silver iodide generators were flown in for use to try to induce rain. Winds finally died and "fires went to sleep."

### Pulpwood Handling Reports

Hyster Co. has recently issued Field Reports Nos. 58 and 65 on profitable handling of pulpwood. Both reports show the Hyster SC-180, 18000 lb. capacity, fork lift truck, equipped with a Pulpwood Loader in a pulpwood yard. Prepared in the field by Hyster engineers. Copies are available from Hyster dealers or company, P.O. Box 4318, Portland 8, Ore.

WILLIAM W. CORLETT, of Wise, Corlett & Canfield, New York firm which has advised this industry on legislative and other matters, died in early June.

## IN PULPWOOD WORLD

W.J. BRIDGES has been promoted to manager, woodlands div., Union Bag & Paper Corp., succeeding J. J. ARMSTRONG, who has resigned. B. E. ALLEN becomes assistant manager.

ERNEST RAND, JAMES K. DICKSON and BRUCE BRADEEN, all of Oxford Wood Dept., Rumford, Me., will play active parts in the 1955 Keep Maine Green campaign.

H. DYER PHILLIPS is new resident woodlands manager for St. Regis Co., Deerfield, N.Y. in charge of woodlands operations in N.Y., Vt. and N.H. He is a grad of College of Forestry, State U. of N.Y., and joined St. Regis in 1941.

GEORGE D. GATES has been transferred from the Adirondack woodlands div. to the N.H.-Vt. div., where he will be forester.

FRANCIS M. LADUC and STANTON G. V. HART have been assigned to woodlands div. North Western Pulp & Power, (St. Regis subsidiary), at Hinton, Alberta. They will form part of the Alberta woodlands div., under the direction of GORDON D. McNAB, resident woodlands manager.

T. F. WHALEN, former resident manager of Three Rivers woodlands division, Canadian International Paper, has been named assistant to woodlands manager F. A. HARRISON, Montreal. K. A. PATTERSON is resident manager of woodlands, Three Rivers, and D. M. JOHNSON holds a similar post with Clova division.

### Will Try Wyssen System in Colorado Forests

The Wyssen (Swiss) Skyline system of high lead logging is being installed for experimental purposes at the Fraser Experimental Forest of the Rocky Mountain region, U. S. Forest Service.

A PULP & PAPER editor in Colorado reports that the experiment will determine the extent to which logging may be carried out upon the steep Rocky Mountain slopes, without soil disturbance, resulting in erosion or sedimentation of reservoirs and water systems downstream.

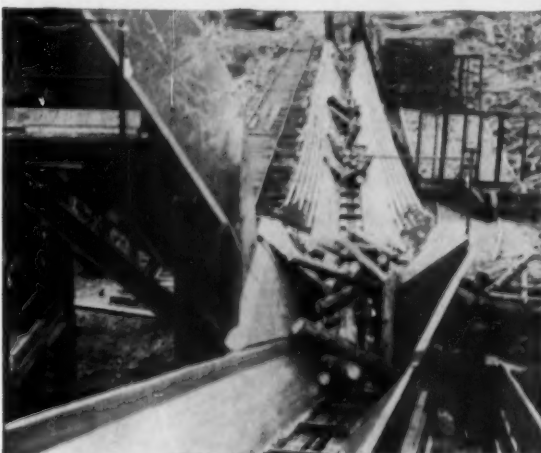
This is the area where pulpwood logging has been carried out for Consolidated Water Power & Paper Co., also, but the Wyssen System will not be used now in their logging.

Field examinations and discussions of use of big insect-infested timber stands in Colorado for forest products have been continuously sporadic.





Two strands of rugged Rex A-111 Durobar Combination Chain with steel angle flights provide the power to elevate pulpwood from flume to barking drums.



Rex Mill Refuse and Log Chain No. 8118 with flight attachments is ideal for moving pulp logs from wood yard to mill. It's ruggedly built to stand up under severe pounding.



Many pulp mills rely on Rex Belt Conveyor Idlers for economical transportation of pulp logs. Here, Rex Flat Belt Idlers carry barked pulp logs from barking drums to the chippers.

## For any wood yard conveying problem... Chain Belt has the right answer

CHAIN Belt has designed a complete line of Rex® Power Transmission, Conveying and Elevating Equipment to give pulp mills better wood handling service...at lowest possible cost. Whether your requirements call for hauling by flume, by chain or by belt, dependable Rex Equipment will handle the job, efficiently.

When you consult with a highly trained CHAIN Belt Man you can expect him to furnish not only the *finest*

equipment of its kind...but also the *right* equipment for the application.

FOREST PRODUCTS BULLETIN 53-54... An informative, illustrated booklet on how Rex Equipment serves the industry will give you a complete picture of our equipment and ability to help you. We will send your copy promptly upon request. Write CHAIN Belt Company, 4691 W. Greenfield Ave., Milwaukee 1, Wisconsin.

Forest Products Industry Looks to **CHAIN BELT COMPANY**  
Milwaukee 1, Wisconsin



CONVEYING • ELEVATING • POWER TRANSMISSION FOR SAWMILLS • PLANING MILLS  
CHIPPING MILLS • PULP MILLS • SOFTBOARD • HARDBOARD AND PLYWOOD PLANTS



## Adds Salt Cake Supply for Kraft Mills

American Potash & Chemical Corp., long the largest supplier of natural sodium sulfate to the kraft industry, has added approximately 20% to its over-all capacity for salt cake production at Searles Lake, Trona, Calif., since last fall in order to keep pace with the expanding kraft pulp and paper production in the Pacific Northwest, British Columbia, and Southern states, which has caused increased demand for sodium sulfate.

This is the first step in American Potash & Chemical's long range plans for maintaining its position as the largest producer of natural sodium sulfate, geared to match the nationally expanding kraft industry.

Producing a variety of chemicals from the complex brines of dry Searles Lake in the Mojave Desert since 1916, American Potash & Chemical Corp. has recently finished the first stages of a large capital investment program for plant and process improvement. Other major products produced by the company at this location include borax, soda ash, potash, lithium and bromine. AP&CC has also recently announced the construction of a \$6,600,000 plant at San Antonio, Tex., for the production of lithium chemicals.

**WILLIAM J. F. FRANCIS**, General Sales Mgr., Western, American Potash & Chemical Corp., Los Angeles. Now has more salt cake for kraft mills.



### Cheboygan Mill Still Is On Sales Block

The idle Cheboygan, Mich., mill of Paper Corp. of America was still for sale as this issue went to press. Chauncey H. Levy, 225 Broadway (Ba. 7-8383), handling the bankruptcy sale, says there had been offers for pieces of equipment, but the intention is to sell the whole mill as a unit. Another contact in sale matters is Francis Lindsay, Cheboygan city attorney. The city hopes it will sell as a single unit, for the sake of the community.

The mill has 8 beaters, 7 E. D. Jones jords, 6 screens, 3 bleachers,

one Shartle-Dilts Hydrapulper, two 136-in. Fourdriniers, 3 grinders and 2 digesters. It has made newsprint, chipboard, etc., groundwood and semi-chemical pulp. The state of Michigan recently publicized increasing amounts of hardwoods now available in that area of the state.

### Changes at Spencer

Spencer Chemical Co., Dwight Bldg., Kansas City 5, Mo., announces two promotions in top sales and reorganization of its sales division made necessary by expansion into new fields.

H. R. Dinges, formerly asst. general sales manager, has been named general sales manager, and H. E. Bingham, who was acting director of product sales, has been named general manager of sales services, heading sales development for both industrial and agricultural chemicals, traffic and advertising. Both will report to J. E. Culpepper, vice president in charge of sales.

Mr. Dinges joined Spencer in 1947 as industrial sales manager. He had been Southern district sales manager with Mathieson Chemical Corp. Mr. Bingham joined Spencer in 1946 as traffic manager, after having served the Pratt-Whitney Aircraft Corp. of Missouri in the same capacity.

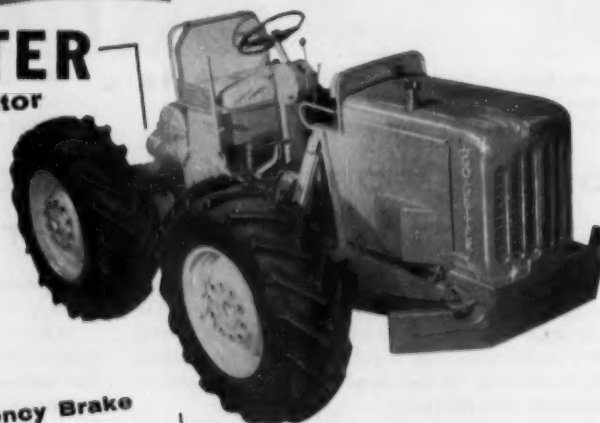
## Something **NEW** in the Field

### THE J. T. GO-GETTER

a completely new tractor with

- Torque Converter
- Automatic Transmission
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- Constant Equal Weight Distribution
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- High Ground Clearance
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**INDEPENDENT HYDRAULIC  
FRONT WHEEL SUSPENSION**



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**C. I. Capps Company, Inc.**  
Jacksonville 6, Florida

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## These Crane valves stay tight on soap oils and fatty acids

**THE CASE HISTORY**—Leakage through valve seats in raw materials supply lines posed a serious problem for Davies-Young Soap Co., Dayton—makers of various type soaps and cleaning fluids. Unwanted materials leaking past metering stations would infiltrate processing vats.

Four different makes of valves were tried before these Crane valves were installed. With all four, results were the same—seat leakage developed quickly; the valves lasted no more than 4 to 8 weeks.

Valve replacement costs were a

factor on top of production losses.

The condition was remedied on installation of Crane No. 1670 Ni-Resist cast iron valves in January 1954. Eighteen months later—with no piping maintenance and no shut-downs whatsoever—the Crane valves are still holding tight. And they show no deteriorating effects from the fluids handled.

Crane Ni-Resist gates don't look much different from similar valves of other makes. Their difference is in properly designed, accurately finished seating of 18-8 SMO stainless

steel—plus the extra erosion-corrosion resistance of Ni-Resist bodies and bonnets cast by Crane. Thrifty buyers know these valves have no "equal" for handling many hard-to-hold, mildly corrosive fluids.

You should have the new folder (AD2047) on these valves. Ask your Crane Representative for a copy, or write to Crane Co., General Offices, Chicago 5, Ill. Branches and Wholesalers serving all industrial areas.

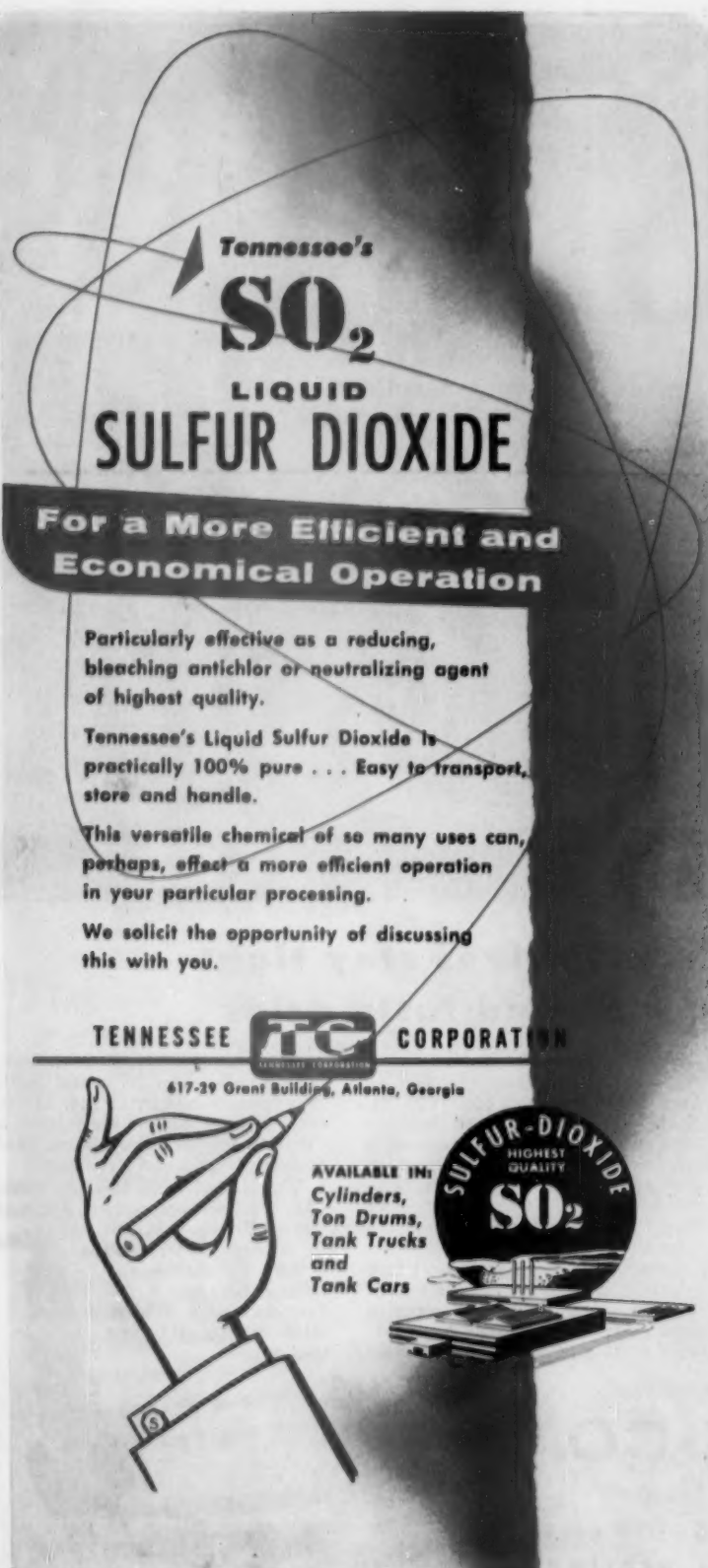
# CRANE CO.

**VALVES • FITTINGS • PIPE  
KITCHENS • PLUMBING • HEATING**



**CRANE'S FIRST CENTURY...1855-1955**





**Tennessee's**  
**SO<sub>2</sub>**  
 LIQUID  
**SULFUR DIOXIDE**


**For a More Efficient and Economical Operation**

Particularly effective as a reducing, bleaching antichlor or neutralizing agent of highest quality.

Tennessee's Liquid Sulfur Dioxide is practically 100% pure . . . Easy to transport, store and handle.


This versatile chemical of so many uses can, perhaps, effect a more efficient operation in your particular processing.


We solicit the opportunity of discussing this with you.

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AVAILABLE IN:  
 Cylinders,  
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 Tank Cars







#### Their Forte Is Paper Economics

HOWARD BAUMGARTEN (left), former Research Asst. in Economics and Purchasing Agent of the Institute of Paper Chemistry, who is now with Parsons & Whittemore, Inc., New York, and RUTH SHALLCROSS (right), former Research Associate in Economics at the Institute, now Consulting Economist to the Institute and others in this industry. She lives at Lake Shore Drive, Rural No. 3, Madison, Ohio. They got together again recently in Appleton, and of course, the old familiar subject came up—paper industry economics. Mr. Baumgarten is a member of P & W's Executive Committee and Economic Advisor to its officials.

#### Maine Mill Is Sold By Great Northern

Louis Calder, president, Perkins-Goodwin Co., has announced that financial interests identified with P-G have contracted to purchase pulp and paper mill at Madison, Me., from the Great Northern Paper Co., together with the power station at Anson, Me.

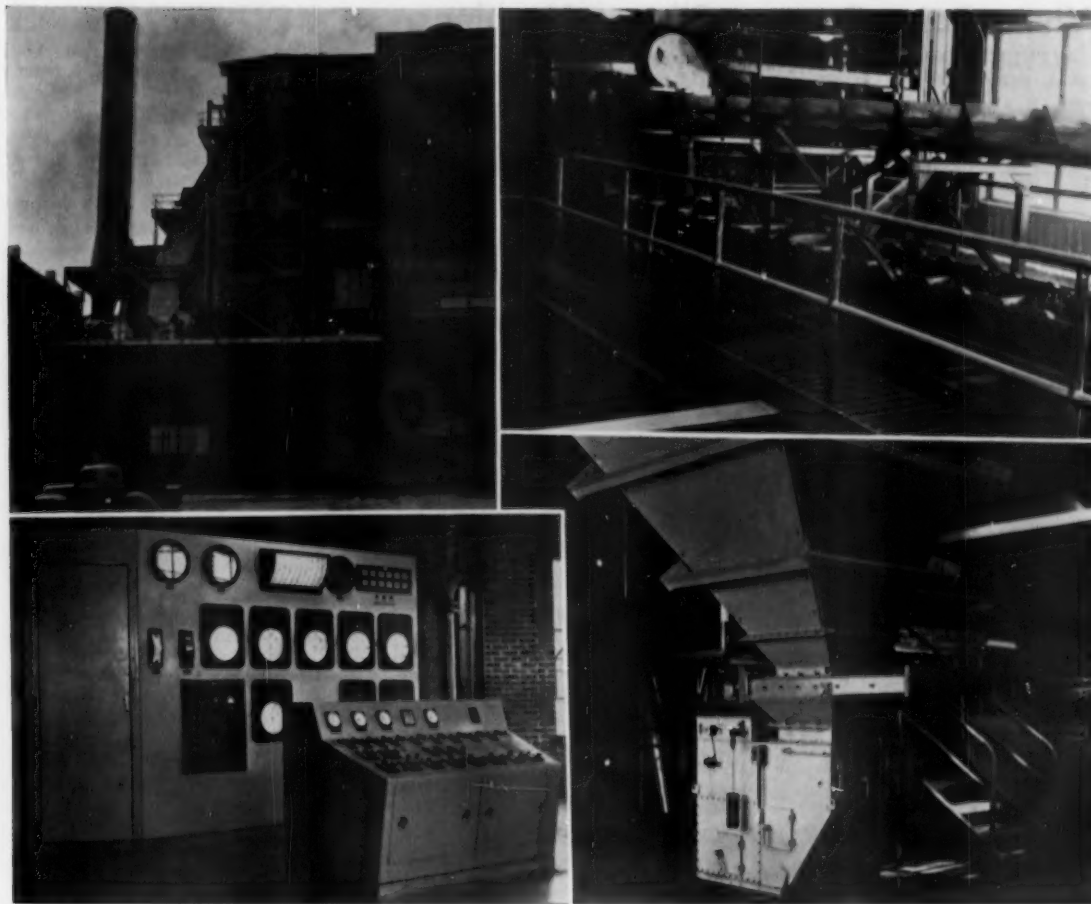
All sales of this mill will be handled by Perkins-Goodwin. No change is contemplated in operating policies, organization, or products developed under Great Northern's management, and the mill will continue to manufacture bleached and unbleached groundwood printing and specialty papers.

#### Story of Industry Told In New Anniversary Book

*Everything AND the Kitchen Sink* is one of the most unusual books of its kind—a production, of course, intended to be a tribute to the 100th anniversary of Crane Co., Chicago, but it is done so unobtrusively that it is literally a "work of art." The whole story of American industry's 100 years is told with a multitude of pictures, including numerous copies of old prints. There are even paper mill and pulpwood pictures!

The text excellently describes how "builders of America turned the brilliant streams of inventors into the practical realities for everyone." It was produced by The Philip Lesly Co., New York and Chicago. For more information, or how to get a copy, write PULP & PAPER, 1791 Howard St., Chicago 26, Ill.





#### View of New Steam Plant Facilities

(Top, left) Mead Corp.'s new No. 5 boiler, built by Combustion Engineering, which stretches 7 stories into the air. Stack rises two floors higher. (Top right) At the end of  $\frac{1}{4}$  mile journey along conveyor belt, coal drops into bunkers for eventual use in boiler.

(Lower left) Bailey Meter Co. provided central control system for the boiler, with automatic controls for air-fuel mixture, dependent on desired steam pressure. (Lower right) Desired amounts of coal to be pulverized before use in boiler drop from bunker into scale-feeder.

## How Mead Mill Met Its Rising Power Needs

New boiler, of 250,000 lbs. per hour capacity, to supply electric power and process steam

● A new No. 5 Boiler has been placed in operation at The Mead Corp.'s Chillicothe, O., Division after successful completion of all tests. Construction on this new addition to No. 2 Steam Plant started 15 months earlier.

This seven and one-half story building with a smokestack which looms two floors higher, cost Mead \$1,875,000 and is another step in the company's expansion and modernization.

The new boiler is connected by a  $\frac{1}{4}$  mile long coal conveyor which

stretches 92 ft. into the air at the highest point along its path from coal storage pile to bunkers. It is geared to carry three rr carloads of coal per hour.

The boiler, capable of producing 250,000 lbs. of steam per hour when operated at top production, will supply electric power and process steam for production facilities. It was manufactured by Combustion Engineering Inc., and combustion controls were by Bailey Meter Co.

Mead's Chillicothe mill is rated as a 550-ton mill for coated and book papers. It makes 210 tons daily of soda pulp and de-inks another 100 tons. O. B. Mason is division mgr.; J. E. Graves, production mgr.

#### Newsprint is Up

Canadian newsprint production is nearly 4% higher than last year, which in itself is an all-time record. Other paper grades and paperboard have exceeded the levels of 1952 and 1953.



## What's Being Done to Silence Machines

● As PULP & PAPER previously reported, noise abatement in machine rooms is a major objective of the North American industry, stimulated and given top priority by top management. A noise abatement committee of the Canadian Technical Section was formed and began its work in 1954. Some results were reported in the June issue of PULP & PAPER (page 65). Top management in the American Paper & Pulp Association started the ball rolling in U.S.A. in February at Paper Week, and it now also has a noise abatement committee (as exclusively reported in P&P in April).

Several devices are in use to counteract the familiar machine-room whine. One of the first attempts to meet the situation was the Abbott & Kraus silencer introduced in the tissue mill of Kimberly-Clark Corp. in Kapuskasing, Ont.

Now comes news that Powell River Co. is so satisfied with what it has done that a technique developed by its research staff has been applied to machines 3, 4, 5, 6 and 7. Machines 1 and 2 are operated at slower speeds and abatement devices are unnecessary. The new No. 8 machine has a couch transfer, to which some modifications must be made before the silencer can be effectively applied. No. 9, recently ordered (incidentally, one of 8 new newsprint machines now being built for North American mills), will be immediately equipped with the silencer. This is to be a 260 in. Dominion Engineering machine.

Officials of Powell River tell PULP & PAPER that they believe couch noise has been reduced by their method to the point where it is less than the level of other paper machine noises. In other words, the problem of couch noise has been virtually solved.

**WHAT POWELL RIVER HAS DONE**—Couch noise originates in the sealing strip where the sheet leaves the couch, and it is offset by the sudden rush of air from inside the couch into the evacuated holes in the couch shell. What the Powell River technical staff has accomplished may be expressed by the term "noise cancellation," and this has been effected by cutting a calculated pattern in the inch-wide micarta sealing strip. By having this hole pattern in the sealing strip there is a tendency for the noise of the air passing into one hole to be offset by the noise from another.

The installation works only where the sheet completely covers the vacuum box, but adjustments can usually be made of a simple nature to make it

applicable, and once the sealing strip is cut to respond to the couch shell's drilling pattern it is equally effective at any paper machine speed.

Some observers are convinced the operation at Powell River, developed by C. W. E. Walker, physicist, is the simplest and least costly installation so far devised.

Experimental earmuffs were sent by the Canadian National Research Council to half a dozen representative paper mills in Canada, and tests indicated that they were highly effective. Disadvantages such as excessive weight and bulkiness causing heat and perspiration, are being remedied.

The muffs are hollow doughnut-shaped sheaths filled with glycerine, joined by a spring clamp. They are about 4 in. in diameter and 1 in. thick. The sheaths are thin plastic film which makes a cushion against the ear.

The Research Council tested reducing couch noise in a miniature machine model only 1 ft. in diameter with a 2 in. perforated face. This led to a couch silencer installed at International Paper mill, Gatineau, Que. The installation is more complex than at Powell River and a different principle is involved.

### How Fitchburg Paper Saved on Press Roll

Competition forced Fitchburg Paper Co., Fitchburg, Mass., to consider a slightly different finish for paper they had been supplying an old customer. Fitchburg had been using a 157 in. long 2 1/4 in. dia. hard rubber-covered press roll, still in fine condition, but needed a roll with a stainless steel surface. Rodney Hunt Machine Co., Orange, Mass., recommended removal

of the rubber covering, refinishing the metal body, covering with type 316 stainless centrifugally cast shell, and precision-grinding to finish diameter.

First, a 250-ton assembly press was required. It had to be long enough to handle the roll plus the sleeve, over 26 ft. from ram to back support, not counting journals. Finally, the shell was preheated to expand it before press fitting. On cooling, the shrinkage assured an intimate interference fit, along the entire face of the roll. After that, machining and finish grinding was relatively simple. The 6-weeks' job saved Fitchburg over \$2000 as compared with the cost of a new stainless steel roll.

### Build California Mill

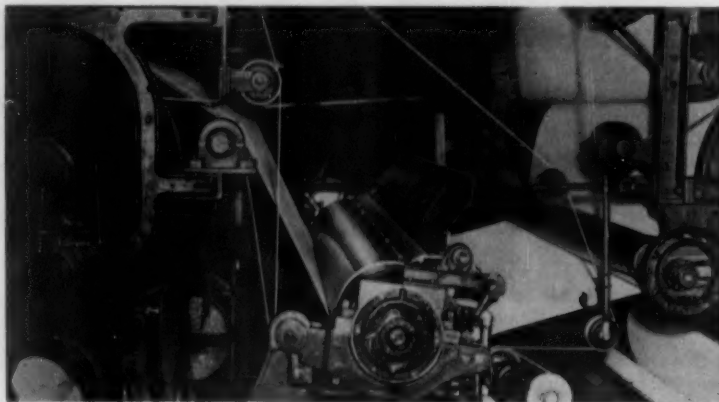
Shooting for Jan. 1 startup or thereabouts, a new 42,000 sq. ft. paper mill is being built at Port Huene, near Oxnard, Calif., for Kalof & Co., headed by Sam Kalof.

Robert Stevens, veteran mill builder of Southern California, is engineer in charge. Paper and cardboard will be made on a machine 400 ft. long. It will be housed in a structure of corrugated iron and steel costing \$1,500,000 alone. Waste paper and board will be reclaimed and pulped.

### "Paper Man Never Dies—Just Unwinds and Rolls Away"

"An old paper man never dies—he just unwinds and rolls away."

That was the remark of Ed Sebastian, on retiring as advertising and sales promotion manager of Orchard Paper Co., to be succeeded by Robt. C. Wellman. Back in 1912, Mr. Sebastian was one of the founders of Brown Paper Co., later becoming its president and was also president of Midland Paper when Orchard purchased it.



### Saved Fitchburg \$2,000

Here's 157 in. Rodney Hunt press roll, with stainless shell replacing rubber on Beloit machine, biggest of the 5 Fourdrinier machines making 200 tons a day of paper from book to all kinds of specialties, and even wallpaper.



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**CARL L. HACKBARTH**, back in U.S.A. from managing Grace bagasse mill at Paramonga, Peru. Now Paper Mill Supt., North Carolina Pulp Co.



### Back From Mill Adventure in Peru

Back to the United States has come Carl L. Hackbarth, after an interesting experience managing the world-renowned W. R. Grace & Co. semi-chemical cane bagasse mill at Hacienda Paramonga in Peru. Grace has announced a \$1,500,000 project to increase production by 50%.

Mr. Hackbarth is now paper mill superintendent at North Carolina Pulp Co., Plymouth, N.C. Born in Wisconsin Rapids, Wis., he previously worked with the Kieckhefer organization, which owns N.C. Pulp, in their Belair, N.J., mill for 14 years before going on his Peru adventure.

The Grace semi-chem process was introduced 12 years ago at the sugar hacienda, 125 mi. north of Lima. Utilizing its cane waste, mixed with purchased pulp, this mill makes tissue, wrapping, kraft board, etc., at rate of 1500 tons per month. The process is licensed to Sandy Hill Iron & Brass Works. A new 110-in. 5-cylinder Sandy Hill machine (30-35 tons a day of coated board) is being added.

### Production and Sales Talk It Over

IN TUNE WITH 1955 COMPETITIVE THEME, this Minnesota & Ontario Paper Co. meeting in Minneapolis could be very important. Four at extreme left (front to back) are: E. J. "PIDDO" CARRIVEAU, Supt. Pulp-Paper Manufacture, Ft. Frances Mill; W. H. SCHLAFGE, General Manager, International Falls Mill; D. E. CHASE, Sales Analyst, Paper Sales, Mpls.; and D. B. JOHANNIS (standing), Order Clerk, Mpls. Then, going around table clockwise, starting at right of Mr. Schlafge: W. J. HILVERS, Sales Rep., Mpls.; GILBERT STEVENS, Sales and

### Norm "Tags All Bases!"

Norman O. Weil, assistant vice president and veteran sales executive of W. S. Tyler Co., finally got around to seeing a ball game in every major league park. Cincinnati's Crosley Field was the only one left which had not harbored Yonkers' No. 1 baseball fan, until the Cincinnati convention. He took along a group to celebrate the event including his chief, President Edward T. Jeffery of Tyler. It was a perfect evening for Norm—Cincinnati's opponents were "the Bums!"

### First Atomic-Powered Pulp Mill

One of the first practical efforts to harness atomic power to a pulp mill is being made in southern Norway at Halden. In cooperation with Norwegian atomic power authorities, Saugbrugsforeningen (United Sawmills) will buy power and steam to supplement its regular supply, which will continue to be used. Initial capacity of the \$3,500,000 reactor will be 20,000 hp, which can be expanded.

### Jagenberg Appoints Pearce

The Pearce Development Co. of Cleveland, Ohio, U. S. A. has been appointed by Jagenberg of Dusseldorf, Germany, to handle the sale of their slitters and sheeters.

Jagenberg has been building sheeters and slitters for all type paper and board for over 77 years, with many features not found in other equipment.

### LATE BULLETINS

**WILLIAM E. BREITENBACH**, of Rayonier, becomes Exec. V.P. of Alaska Pine.



### William E. Breitenbach Named Alaska Pine V.P.

William E. Breitenbach, vice president, manufacturing, Rayonier Inc., New York, has been appointed executive vice president of Alaska Pine & Cellulose Co., Ltd., Rayonier subsidiary.

Alaska Pine has two mills in British Columbia, and a big expansion program is under way for more production. Mr. Breitenbach is familiar with these operations, having lived many years at nearby Port Angeles, Wash., where he was division manager for Rayonier. He is a U. of Wisconsin graduate, and a founder of TAPPI's oldest section on the Pacific Coast.

### Gerald Alcorn Dead

Gerald F. Alcorn, construction engineer, pulp division, Weyerhaeuser Timber Co., builder of its latest kraft mills at Everett and Longview and in charge of construction of new Cosmopolis mill, died July 29 of pneumonia. He was a graduate of U. of Washington, where he was a member of famous rowing crews.

Service Rep., Mpls.; OSCAR OGREN, Sales, Mpls.; J. C. HALL, Sales, Kansas City, Mo.; J. V. OTNESS, Asst. Sales Mgr., Mpls.; ROBYN CAMPBELL, Sales Mgr., Mpls.; R. D. BATTEN, Sales, Chicago; P. A. JOHNSON, Sales, Chicago; W. D. FROST, Sales, Chicago. Two seated behind Mr. Stevens: H. S. TAYLOR (left), Supervisor, Free Sheet Section, Mpls., and R. E. LUNDBORG, Supervisor, Groundwood and Coated Paper, Mpls. Standing, rear middle: E. R. ZIMMERMAN (left), Sales and Service, Mpls., and G. N. FISHER, Service, Mpls.





# Jones

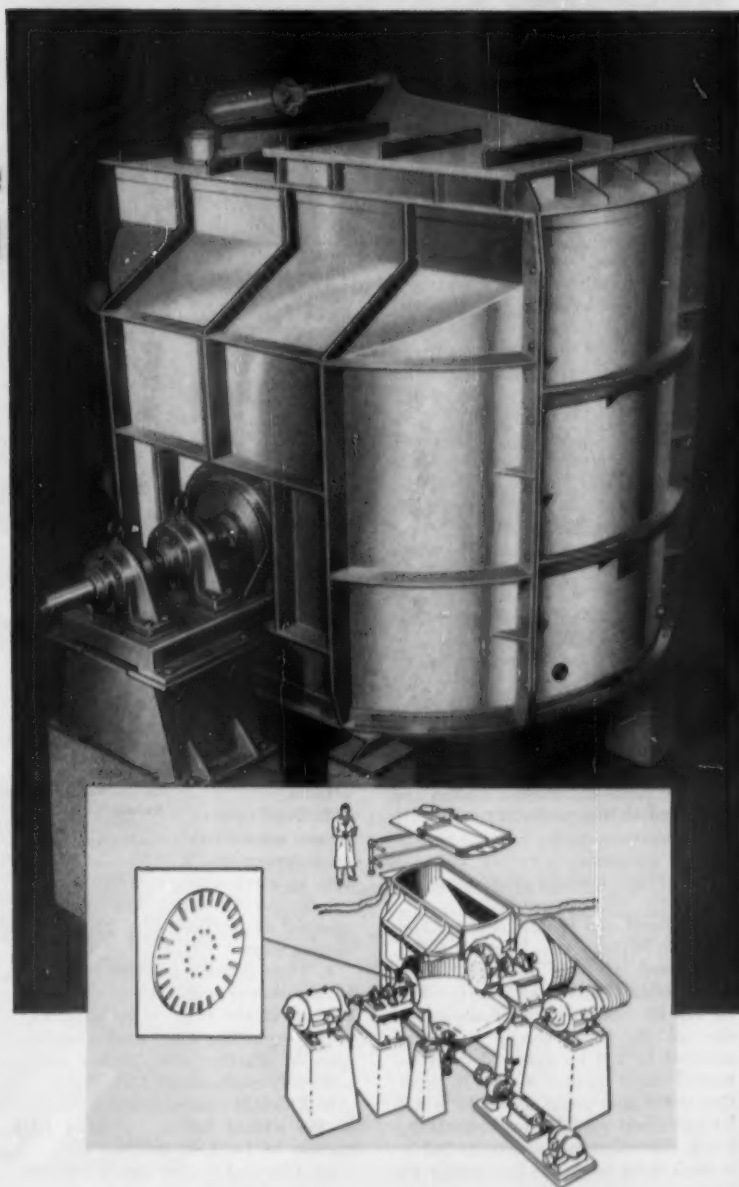
## HI-LO PULPER

**Completely defibers  
in less than half the  
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Here's the answer to the problem of pulping waste news, wet-strength broke, and other hard-to-treat material.

The unique feature of the HI-LO Pulper is its *two* rotors . . . a large-vaned Lo-Speed one for initial break-up and thorough circulation; a small-vaned Hi-Speed one for complete defibering in minimum time with most efficient use of horsepower.

The HI-LO, will completely separate fibers without cutting. Actual tests show substantial improvement in tear; and in many cases, it will produce treatment on wood pulps superior to a Hollander Beater, and in a fraction of the time. Ask your Jones representative for details, or write for Bulletin No. EDJ-1063.



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# How Publishers' Paper Treats River Water

Plant capable of producing 15,000,000 gals. of process water per day permits production of fine grade papers

By H. L. THACKWELL

Kaiser Engineers

● Publishers' Paper Co., Oregon City, Ore. (actually a predecessor company), started up in 1908 with a capacity of 18 tons daily. The mill has grown to 330 tons daily. Water is supplied from Willamette River. The raw water varies in turbidity from a low of 2 ppm in dry weather to 300 ppm after winter freshets.

Until recently the only treatment the water received was fine screening and chlorination.

In Oct. 1952, the management decided to install treatment facilities that would permit the production of fine grade papers. Financing for a plant capable of producing 15,000,000 gals. of process water per day was completed in 1953.

Specifications for treated water limited the permissible turbidity to 5 ppm and a color value not over 5. Slime control by means of chlorine was also a requirement.

The site was a 0.26 acre tract on plant grounds. With limited funds, the company was faced with the problem of obtaining maximum treatment, including filtration with 1,000,000-gal. clear water storage. Kaiser Engineers of Oakland, Calif., designed a plant to deliver water under a head of 150 ft. into the plant distribution system and remained on the project in a consulting capacity.

**What Plant Includes**—The plant included:

1. Influent and effluent piping, 24 in. diameter, having a total length of 600 ft. each. Dual pumps of 7% mgd capacity each, having 75 hp motors, were provided for low lift influent. Two effluent pumps also of 7% mgd capacity each and powered by 250 hp motors delivers the treated water against a 150 ft. head. One 6,300 gpm pump driven by a 125 hp motor was provided for backwashing filters. Water hammer was controlled by a check valve set in the line outside the plant.
2. A cylindrical slotted screen for removal of floating debris.
3. A measuring device over weirs, with automatic transmitting and recording equipment.
4. Mixing baffles channels of around-the-end type, having 10 min. retention time at 15 mgd.

Monthly Average	Oct.	1954 Nov.	Dec.	Jan.	Feb.	1955 Mar.	Apr.	May
Turbidity raw, ppm	6.8	10	18	21	8	13	13	3.7
Color raw	19.0	25	39	38	30	38	28	16.0
Sum turbidity & color	25.8	35	57	59	38	51	41	19.7
Turbidity settled, ppm	3.0	4	5.9	4.8	4.5	4.6	3.9	2.3
Color settled	5-	5-	5-	5-	5-	5-	5-	5-
Sum turbidity & color	8.0	9	10.9	9.8	9.5	9.6	8.9	7.3
Percent removal	69	74.3	80.8	83.4	75.0	81.1	78.3	63.5
Alum, ppm	17.1	18.8	22.2	18.8	17.1	17.1	17.1	12.0
*Coagulation ratio	1.51	1.86	2.58	3.14	2.22	2.98	2.4	1.64
Flow MGD	5.787	9.034	10.88	10.83	11.58	11.48	11.0	9.80
Overflow gals/sf/d	578	903	1088	1083	1158	1148	1100	980
Detention time, hrs.	4.83	3.08	2.56	2.57	2.41	2.43	2.53	2.85
Flow influent	5.787	9.034	10.88	10.83	11.58	11.48	11.00	9.8
Flow effluent	5.374	8.763	10.64	10.60	11.31	11.27	10.82	9.25
Percent backwash	7.1	3.0	2.21	2.12	2.3	1.83	1.6	2.9
Filter rate g/sf/m	1.78	3.0	3.54	3.52	3.75	3.72	3.6	3.2
Turbidity filtered	1.2	0.9	1.2	1.0	1.0	1.0	0.9	0.4
Color	5-	5-	5-	5-	5-	5-	5-	5-

\* Coagulation ratio equals Turbidity ppm ÷ Color Value. High ratio number indicates chemical efficiency.

Alum ppm  
The months of January and March show the best results in chemical economy, and the month of April in percent backwash. Optimum overflow rates 1100-1200 gals/sf./d and detention time 2.54 to 2.32 hours.

With a maximum flow of 15 MGD plant capacity, the surface overflow rate is 1500 gals/sf./d and the detention time is 1.66 hrs. The filtration rate is 4.93 gals/sf./m.

## Average Results at Publisher's Paper Since Startup of Water Treatment Plant in October 1954

5. Two flocculation tanks, provided with vertical, variable speed, flocculators. Total retention time is 25 min.

6. A channel for by-passing the flocculators.

7. Twin upward flow tanks for continuous sedimentation of flocculated matter. Retention time is 1.86 hrs. at 15 mgd, with an overflow rate of 1,500 gals. per sq. ft., per 24 hours. The effluent is skimmed off over weirs having 1,600 ft. of weiring edge.

8. Three double rapid type sand filters having wheeler type bottoms with filtration rate of 4.93 gals. per sq. ft. per min. at 15 mgd. The filter sand used was specified effective size .50 mm and a uniformity coefficient of 1.30.

9. A double clear-well under the floor of the settling basins, having a total capacity of 1,000,000 gals.

10. Chemical feeders are a chlorinator, capacity of 600 lbs. per day, a Rotodip liquid alum feeder, dry lime feeder, and dry feeder for dispensing activated carbon or bentonite powdered clay. This feeder may also be used for sodium aluminate.

11. Central control panel provided with miniature recording mechanisms. The operator can open and close all filter valves by push button control.

All pumps and motors are automatically started and stopped. Chemical feeders will feed chemicals, proportionate to flow, with rates previously set by the operator.

12. A small chemical laboratory for the routine analysis of water samples.

13. A chemical feed storage room for chemicals. Two steel rubber-lined tanks are provided for liquid alum storage. This alum will be pumped from tank truck on street level to the liquid storage tanks on the third floor. Dry chemicals and chlorine drums are delivered to the landing dock and hoisted in an elevator to storage. The operation of all units is automatic. When water level drops, the process will start up and continue all operations. (Filters are washed by a single push button control; all valves are opened and closed from control panel by operator. Timing sequences are manually controlled.

**EQUIPMENT CHOSEN**—The project was let to competitive bidding in Sept. 1953, the low bid of \$560,000 being awarded to Austin Co., Seattle. Publishers' Paper furnished motors for main pumps. Total cost of the project including all extra items was approxi-





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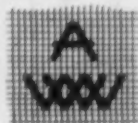


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And in at the very start of specialty papers—in every field where paper goes to work... Fourdrinier wires. Appleton Wires. Good wires—by a 59-year test of industry-wide acceptance and use.

## Appleton Wire Works, Inc.







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### Provides Tough, Resistant Paint Film For Metal, Wood And Concrete Surfaces

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And "Speed Rex" resists hard knocks as well as chemicals and moisture. You paint less often when you standardize on "Speed Rex" because rough, tough physical abuse bounces off the rugged hide of this protective coating.

The reason "Speed Rex" can take so much punishment is Devran . . . an Epoxy Resin that gives paint greater wear-ability and resistance to corrosive chemicals.

Maintenance Problem? TELL IT TO TRUSCON!



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If you were to bounce a solid ball of Devran, or drive it with a golf club, you'd see how "alive" it is. It's this lively toughness that enables Speed Rex to bounce back after absorbing the roughest kind of industrial treatment. Get the full details on work-saving Speed Rex from your Truscon Sales Engineer. Or write for literature . . . now!



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mately \$600,000, which included influent and effluent lines, valving and by-pass to river.

Controls are butterfly valves with Venturi nozzles, air operated from panel board. Controls are by Minneapolis Honeywell. Feeders and chlorinator are by Builders Iron Foundry. Pumps are Fairbanks Morse. Motors with starting equipment are by General Electric. The structure is concrete and steel frame with asbestos siding.

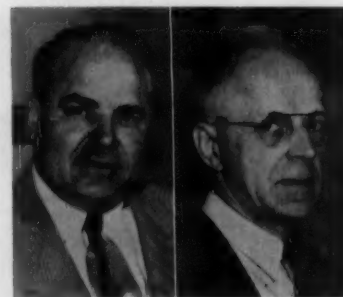
Publishers' Paper was represented in the field by Sam Robinson, vice president and gen. mgr., Carl E. Braun, vice president and mill mgr., E. Schweitz, chief engineer, Sydney Haagenson, resident engineer of construction, Fred J. Weleber, chief chemist-operating supervisor, and C. Mayer, assistant chemist and chief operator.

Capital cost of this project for 15,000,000 gals. capacity is \$40,000 per million gals., a low figure for a complete treatment plant including storage for 1 mg and 24 in. influent and effluent lines with high and low lift pumping equipment.

Average results since the initial start-up period in October 1954 are as shown in accompanying table (on preceding page).

### Supplies Norway Mill


George Lamb, president of Lamb-Grays Harbor, Hoquiam, Wash., reports shipment of half a million dollars worth of pulp finishing equipment to Aktieselskapet Borregaard near Oslo, Norway. Next year, Mr. Lamb will send over technicians to assist in installation.



### Prevost, Draper Promoted

BRUNO E. PREVOST (left) has been promoted to Vice Pres. in Charge of Manufacturing and RALPH L. DRAPER (right) to Chief Engineer of John W. Bolton & Sons, Inc., Lawrence, Mass., manufacturers of paper mill equipment. Mr. Prevost had been Gen. Mgr. of Bolton's Emerson Division and Mr. Draper was formerly Production Mgr. of the Bolton plant. Mr. Prevost is responsible for several patents in development of the Bolton Automatic Plug Pressure Control System as well as magnetic separators and magnetic traps, Jordan safety plug positioners, carbide inserted spray nozzles and others.





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to meet your every need.



**HOW MERSEY PAPER BOOSTS OUTPUT**—Mersey Paper Co., the Nova Scotia newsprint operation which last year reached a new high production of 138,000 tons, carried out improvements costing nearly \$500,000 and expansion is still in progress.

Daily output will soon be at a 450-ton rate, one machine having been speeded up to 1740 fpm. A pressure headbox and vacuum pickup are to be installed. Three Chemipulp KC circulating systems, Northern Pumps supplied by Wm. Kennedy & Sons, Foxboro and Minneapolis-Honeywell instrumentation and Welland castings are other features being added.

One big advantage Mersey Paper Co. has is its location on icefree tide-water, permitting deepwater as well as rail shipments throughout the year. The company's 900 sq. mi. of freehold timber lands contain about 2,400,000 cords of pulpwood, according to last estimates.

**NEW MILL NEAR ESPANOLA?**—The Blind River country, south of Espanola, Ont., where KVP Co. has its mill, is again being mentioned as the prospective site of a big pulp-paper operation. McFadden Lumber Co., one of Ontario's largest lumber enterprises, has extensive timber limits in

that area and has long been anxious to go into pulp.

McFadden and E. P. Taylor, Toronto capitalist, who is chairman of B. C. Forest Products, Ltd., the Vancouver company planning a \$25,000,000 bleached sulfite mill on Vancouver Island, are reported to have applied for a forest license covering a part of the Blind River holdings for an integrated pulp-paper project.

**NEW BOWATER STOCK ISSUE**—Introduction of a new stock issue for Bowater Paper Corp. totalling 2,400,000 ordinary shares stirred up considerable turmoil in Canadian markets recently, but by now most of the confusion has been cleared up.

The offering was on the basis of one new for each three shares held, the price of 70 shillings being about \$9.60 in Canadian dollars and adding up to \$23,000,000. A few months ago such an offering would not have aroused much interest in Canada, but huge blocks of British stock have been moving across the Atlantic, and one estimate is that 400,000 shares of Bowater stock have gone to Canada, much more to the U.S.

The deal was complicated because record date for the issue was set back to June 1—a retroactive feature not common in Canadian markets. An-

other cause for confusion—two categories of shareholders were affected—North American and others. To holders on this continent, buff-colored "provisional allotment letters" were mailed. Everyone else got white ones. And each category had a different financial house for servicing, one in Montreal and one in London. There were other features that had brokers bewildered. Bowater's sent two key officials from London to New York to try to straighten things out, and hurried conferences were held in Montreal and Toronto. It was decided to make the letters interchangeable, but that didn't clarify everything.

**SIX DAY WEEK STILL HAMPERS EAST**—Newsprint mills in British Columbia operate on a seven-day basis, but in Eastern Canada the industry has always been affected by a week-end interruption, and it looks as though the six-day week will continue as a result of unions' rejection of a proposal for continuous operation.

New contracts have been signed between the International Brotherhood of Pulp, Sulphite & Paper Mill Workers and most of the eastern Canadian mills providing for 5% pay increases, and none of them call for a seven-day week.

Bowaters-Newfoundland offered a 6% wage increase coupled with a 7-day week, but the pattern was set by Canadian International—5% wage increase and a 6-day week. Anglo-Newfoundland and Spruce Falls Power & Paper Co. had suggested a 7-day week.

**ADDS NEW ROSS DRYER**—A Ross dryer was recently installed at the Smooth Rock Falls, Ont., mill of Abitibi Power & Paper Co. as part of an improvement program carried out by the company's own engineering staff and Foundation Co. Among those principally concerned with the project were Mill Manager Veni Oleskevich, Resident Engineer Walter Lemiski and Mill Chemist Rolly Schwinghamer.

At its Iriquois Falls mill the Abitibi company has completed installation of new Canadian General Electric amplidyne controlled drives for paper machines 1 to 4.

**STARTS NEWSPRINT MILL**—Start of construction of the MacMillan &



**It Wasn't Exactly News to Them, But . . .**

When representatives of the Kamyr organization met in Vancouver, B.C., for conference recently, they were surprised to read in PULP & PAPER the exclusive announcement that North Western Pulp & Power Co. planned to adopt a (Kamyr) continuous cooking process at its new 400-ton sulfate mill at Hinton, Alberta. Pictured, l to r: TORE AHLEN, Manager of Lundberg-Ahlen Equipment Ltd., Vancouver, B.C.; DR. JOHAN RICHTER, President and Managing Director, A. B. Kamyr, Karlstad, Sweden; KNUTE DAHL, President, Kamyr, Inc., Hudson Falls, N.Y.; and LENNART LUNDBERG, of A. H. Lundberg, Inc., Seattle, Wash., whose father, A. H. Lundberg, heads the organization in the Northwest. "Continuous cooking in Alberta," said Dr. Richter, "will be by far the largest installation of its kind and the process will be integrated in the overall operation from its inception."



Bloedel newsprint and board mills at Port Alberni, B.C., was marked July 12 at a ceremony at which Premier W. A. C. Bennett officiated in the presence of H. R. MacMillan, chairman; B. M. Hoffmeister, president; C. Crispin, vice president, pulp, and others.

**NATURAL GAS FOR ST. REGIS MILL**—Frank E. Ruben, president of North Canadian Oils, Calgary, has announced that a contract has been completed whereby Alberta natural gas will be supplied to the pulp mill being built by his company in partnership with St. Regis at Hinton, Alta.



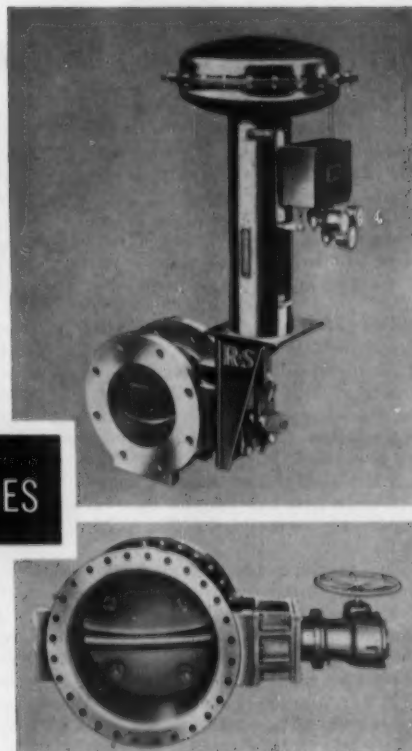
#### Director for Powell River

A grandson of a founder of Powell River Co., CONLEY BROOKS (right) was recently appointed to the Board of the Powell River Co., succeeding his father, the late EDWARD BROOKS. With him are (left) M. J. (JOE) FOLEY, now President of the company, and JOSEPH SAMPLE, whose family has also been long associated with the Brooks-Scanlon organization. Conley Brooks is the eldest of three sons and has been active in the business life of Minneapolis.

**PANELIT FORMS CANADIAN AFFILIATE**—Albert F. Sperry, president of Panellit, Inc. Skokie, Ill., has announced the formation of a Canadian affiliate, Panellit of Canada, Ltd., to specialize in engineering, design and fabrication of industrial automatic control systems, graphic and control instrument panels and information systems. It is located at 60 Newcastle St., Toronto 14, Ont. T. A. Hislop, formerly with Canadian Industries, Ltd., is chief engineer.

**WINS MANY AWARDS**—St. Regis Paper Company, Vancouver, B. C., has won international recognition for its safety record, winning six awards from four sources. Two were by the Workman's Compensation Board, one for the 1954 record, and the other for a three year record without a single time-loss accident.

**BRITISHERS TOURED CANADA**—About 40 members of the Technical Section, British Paper and Board Makers Association, visited the industry in Canada this summer. Several members plan to travel to the West Coast to visit mills.



## R-S VALVES ASSURE ACCURACY, SPEED AND ECONOMY

Automatic or manual—whichever you choose—the S. Morgan Smith R-S Valve line meets these three challenges to valve performance.

### UNIFORM CONTROL IN ALL POSITIONS . . .

R-S Valves give consistent control of flow through all positions in its normal regulating range. The disc simulates a straight line, semi-log quality.

### REGULATION AND CLOSURE ARE QUICK . . .

R-S manual valves are actuated by a lever, chain lever, hand-wheel or chain handwheel. Power actuation can be provided if desired.

### MINIMUM PRESSURE DROP SAVES POWER . . .

The bevelled disc of the R-S Valve seats solidly with a metal-to-metal seat. Accurate machining and a 9° to 12½° angle of closing insure minimum clearance for minimum leakage. Drip-tight or bubble-tight closure can be obtained with the positive action of a rubber seat valve.

Over 75 years experience in hydraulic design and engineering stands behind valves. For further information about butterfly, cone or ball valves for use in the process fields, see your instrument maker or write to S. Morgan Smith Company, York, Pennsylvania.

HYDRAULIC  
TURBINES  
PUMPS

GATES & HOISTS  
TRASH RAKES  
ACCESSORIES

HYDRODYNAMICS

ROTOVALVES  
BALL VALVES  
BUTTERFLY  
VALVES

FREE DISCHARGE  
VALVES  
CONTROLLABLE  
PITCH SHIP  
PROPELLERS

# S.M.S.

S. MORGAN SMITH CO.

AFFILIATE: S. MORGAN SMITH, CANADA, LIMITED, TORONTO



## Will Prophets of Sulfite Doom Eat Words?

● One of the rare modern instances of any material expansion in sulfite woodpulping is taking place at Charmin Paper Mills, Inc., Green Bay, Wis.

Joseph M. Conway, president and general manager of this company, told PULP & PAPER that engineering is proceeding for an expansion of sulfite pulp production from about 135 to 175 tons per day. The 40-ton increase will be achieved by addition of a digester and introduction of circulation systems in all digesters—the 4 existing ones and the new one.

Any increase at all in sulfite pulping is big news, and this one, while it is not so big, has disproved many a prophet who has forecast that expansion of conventional sulfite pulping is over.

The developments that made this expansion possible are:

(1) Charmin's new torula yeast plant, biggest of its kind in the world, which ended the effluent disposal problem for that mill and,

(2) its utilization of about 70% hardwoods in its sulfite cooks.

This is a tribute to Mr. Conway himself, who, as the founder and head of the Sulfite Pulp Mfrs. Research League for 15 years, repeatedly

stuck to his guns—that "the sulfite industry's problems will eventually be solved through science; never through politics." Of course, yeast markets are limited, and other mills cannot economically follow Charmin's lead, but all are seeking their own solutions.

Aspen, a scorned "weed" tree a few years ago in the Lake States, is now the major wood species used at Charmin, thanks to technical advances making its use for quality pulps possible. The sulfite mill expansion will make Charmin almost a self-contained mill, but it will still purchase special pulps, including long-fiber pulps.

A large warehouse also will be another addition at Charmin Mills. Besides the yeast plant, an Infilco water treatment plant and a new converting plant are recent additions there.

All expansion is under direction of M. J. Auchter, vice president in charge of manufacturing. Bob Kissel is gen. supt. and Everett Uelbrick is sulfite supt. Consultants are Helmick & Lutz, Essex Bldg., Minneapolis.

### NEW MACHINE CONTEMPLATED

—President J. M. Conway of Charmin Paper Mills told a stockholders' meeting recently of the need for added pulp and paper production facilities.

"One of the first things we want to do is increase our sulfite pulp production. A new paper machine would give us another 65 tons of Charmin tissue enabling us to meet the continuing increase in demand."

### Which was First?

Which is the oldest employe publication in this industry?

An inquiry by the late Don Rochester of APPA discloses Bird & Son's *Bird Neponset Review* first published in Jan. 1913. Before that year was out, Strathmore's *Strathmorean* and Kimberly-Clark's *Safety Bulletin*, forerunner of its present excellent magazine *Cooperation*, were off the press.

Do you know Champion Paper & Fibre Co. publishes a magazine for editors of employe magazines and company publications?

### News for Readers Abroad—BCI Makes Deculator

Of interest to Pulp & Paper's many readers abroad is news that the Deculator, a patented system for deaerating headbox furnish, developed by Rotaread Corp. of Bronxville, N.Y., will be manufactured and sold by Black-Clawson International Ltd., of London.



**Sangder Promoted in Rayonier; Morehouse Advances in Nopco**

OTTO H. SANGDER (left), new Asst. Pulp Mill Supt., led a group of promotions at Rayonier's Hoquiam, Wash., division, which were announced by Res. Mgr. Geo. A. Holt. P. M. Toppari advanced to Chief Chemist, succeeding Mr. Sangder, and in turn was succeeded as Asst. Chief Chemist by Edward Button. Mr. Sangder was graduated from U. of Washington in 1931, Mr. Toppari from Wash. State in 1931 and Mr. Button from U. of Wash., 1950. He helped start up the Jesup, Ga., mill.

WALTER B. MOREHOUSE (right), is new General Sales Mgr. of Industrial Division, Nopco Chemical Co., supervising sales divisions for paper chemicals, specialty sales, tanning oils, textile chemicals and textile fibers.

## Asten-Hill to Have Plant in Oregon

Asten-Hill Mfg. Co., of Philadelphia, manufacturers of dryer felts, has acquired the cotton dryer felt business of the California Cotton Mills Co., of Oakland, Calif., and is moving the dryer felt manufacturing operations of the latter company to Salem, Ore.

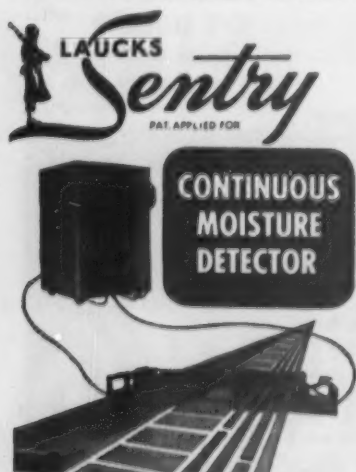
This expansion of Asten-Hill and its opening of its own branch plant on the Pacific Coast is in line with recent trends in machine clothing companies to establish plants within big regional pulp and paper producing areas.

The new Asten-Hill plant will occupy a building in Salem formerly occupied by National Automotive Fibres Corp., which operated a flax rug plant there. The first loom for the new Asten-Hill plant was shipped to Salem in July and startup is scheduled for early fall.

John Roslund, Portland, Ore., continues as sales representative for Asten-Hill on the Pacific Coast. Ernest Liszewsky will be plant manager at Salem.

### Sonoco to Relocate

Relocation of Sonoco Products plant at Garwood, N.J., will be effected during the current year, according to J. L. Coker, president. Several sites are being considered.



### FOR POSITIVE MOISTURE CONTROL

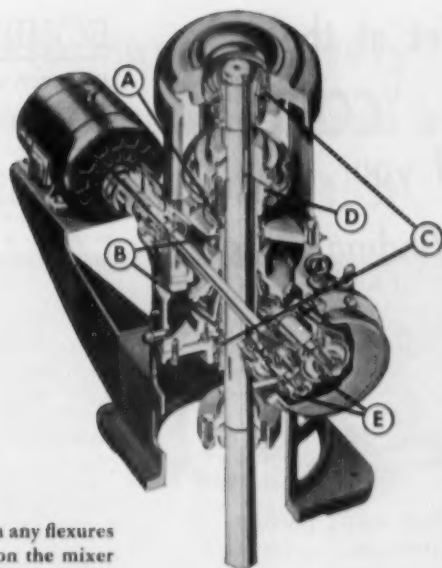
The first high speed, continuous detector to incorporate ALL features necessary for 100% control, SENTRY® provides full-width scanning, accuracy throughout a wide range of basis weights and moisture contents, and unprecedented performance on both coated and uncoated products. A production line machine, SENTRY is used in more than 100 applications ranging from rough lumber to the finest paper. Write TODAY for complete information.

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A Leader in Wood Technology For 47 Years



*Why you'll probably get*  
**20 years' service**  
*out of this fluid mixer*



No, we can't guarantee that LIGHTNIN Mixers will mix fluids, day in, day out, for 20 years or more. But a great many of them do.

Here are just a few of the reasons why you may find that LIGHTNINs in your tanks enable you to hold depreciation costs down where they belong—and keep productivity *up* by minimizing shutdowns for maintenance and repair.

An important part of this LIGHTNIN Mixer is the gearing. And that's the part that needs most protection.

The gears you see here are me-

chanically insulated from any flexures or sudden shock loads on the mixer shaft. The gears drive a hollow quill (A), suspended in heavy-duty bearings (B) which carry power transmission loads only.

The mixer shaft is suspended in its own separate pair of adapter-type prelubricated bearings (C). The shaft passes through the quill with full clearance. Shaft and quill are connected at only one point (D) by a flexible coupling.

This hollow-quill construction isolates the shaft from the gearing. It

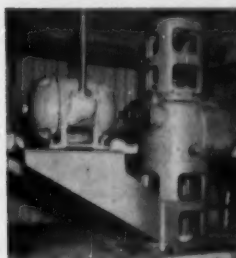
saves wear on the gears, and protects them against damage. And it lets you remove the mixer shaft upward or downward, and you can even use shafts of different diameters.

**Interchangeable speeds**

The change gears (E) permit quick change of speed for a range of 16 standard AGMA speeds. You can change mixing speed, should it ever become necessary, by replacing two change gears with a pair of a different ratio. No special tools are required, and the mixer need not be removed from the tank.

You can select from hundreds of power-speed combinations, in standard units, without need for special construction. Speeds other than standard can be had without limit.

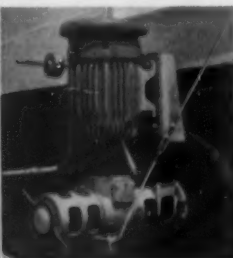
Get set *now* to take advantage of the long-term savings you make with LIGHTNIN Mixers. For the full story, just call your LIGHTNIN representative, listed in Thomas' Register. Or write us today.



**TOP ENTERING LIGHTNINs** provide exact power-speed combination to fit the job. Models for open or closed tanks. Sizes 1 to 500 HP.



**LIGHTNIN PORTABLE** Mixers make any open tank an efficient mixing vessel. Thousands are in use. Electric and air driven types. Thirty models, 1/2 to 3 HP.



**SIDE ENTERING** units mix or blend fluids in tanks as large as 5 million gallons. Choice of stuffing boxes or rotary mechanical seals. 1 to 25 HP.

**Lightnin**  
**Mixers**

MIXCO fluid mixing specialists

Get these helpful facts on **mixing**: cost-cutting ideas on mixer selection; best type of vessel; installation and operating hints; full description of LIGHTNIN Mixers. Free—no obligation. Just check data you want, tear out and mail to us today with your name and company address.

- ☐ B-102 Top Entering Mixers (turbine, paddle and propeller types)
- ☐ B-103 Top Entering Mixers (propeller types)
- ☐ B-104 Side Entering Mixers
- ☐ B-107 Mixing Data Sheet

- ☐ B-108 Portable Mixers (electric and air driven)
- ☐ B-109 Condensed Catalog (complete line)
- ☐ B-111 LIGHTNIN Rotary Mechanical Seals
- ☐ B-112 Laboratory Mixers

**MIXING EQUIPMENT Co., Inc.**, 141-h Mt. Read Blvd., Rochester 11, N. Y.  
 In Canada: Gresy Mixing Equipment, Ltd., 100 Miranda Ave., Toronto 10, Ont.



# Get at the "CORE" of your Winding costs...



**TIDLAND shafts prevent core damage . . . Cores no longer needed in many cases**

The new Tidland pneumatic wind and unwind shafts prevent all damage to cores. They also speed up your winding operations and increase production as much as 47%, time studies show.

Core damage is eliminated by the tight grip the Tidland shafts exert along the full length of cores, preventing all slippage. Metal tip cores are no longer needed. Many Tidland shafts are used without cores.

Tidland's leaf-type shaft for surface rewind is prepared for use by inflating an inner tube to expand the leaves. When the roll is fully wound, the shaft is readily removed with minimum effort by releasing the air pressure, which retracts the leaves.

Lug-type shafts are built for unwind. Lugs grip the core or roll its full length, preventing slippage. When the air is released, lugs spring back into the shaft . . . The lug-type is graduated in inches to speed up setting rolls of different widths and to eliminate need for collars and stops.

Tidland shafts require no lead hammers, chucks, wedges, set screws, etc. Each shaft is equipped with air hose and nozzle.

Shafts are custom-built in any length, and in diameters from 2½" to 24". Write for further details and estimates.

**TIDLAND SHAFTS**  
Manufactured by Tidland Machine Co.  
**CAMAS, WASHINGTON**

Represented in New England by  
**ORTON CORP., Fitchburg, Mass.**

## EQUIPMENT AND SUPPLY NEWS

**F. C. HUYCK & SONS**, Rensselaer, N.Y., announces its new 4-D Treatment, a chemical development which changes physical and chemical characteristics of wool fibers used in manufacture of paper-makers' felts, making them tougher while also stabilizing wool's normal tendency to stretch. A book describing this treatment, which is said to improve toughness, finish and openness, is available from the company.

**GRIFFITH RUBBER MILLS** of Portland, Ore., has completed the largest paper machine roll to be rubber covered on the West Coast, measuring 48 in. diameter, and with a 298 in. face. It will be installed in the new Beloit newsprint machine scheduled to start operating Aug. 1, at Great Northern's East Millinocket, Me., mill. Griffith covered this roll with their exclusive rubber formula, said to give better water removal and longer felt life in high speed machines. It will be installed in the center position of first and second presses.

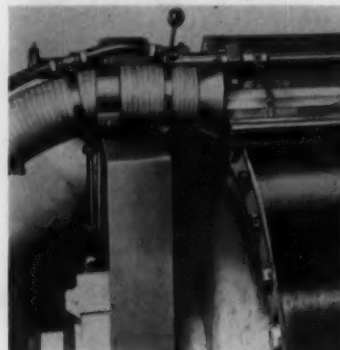
**MASON-NEILAN REGULATOR CO.** has a new 72-page catalog No. 305, which describes in detail their control valves and auxiliary equipment. Full data are given on construction of their standard control valves and special control valves. Write Mason-Neilan Regulator Co., 1190 Adams St., Boston 24, Mass.

**TUBE TURNS PLASTICS, INC.**, Louisville, Ky., has introduced a complete line of solvent welding pipe fittings and flanges of injection molded unplasticized polyvinyl chloride.

**CONSOLIDATED CHEMICAL INDUSTRIES, INC.**, will build a large contact sulfuric acid plant at Le Moyne, Ala., according to G. L. BOND, president. The \$2,000,000 plant is to be completed in mid-1956.

**NOPCO CHEMICAL CO.** has installed a new polymerization unit at its Cedar-town, Ga. plant, according to Dr. Edwin A. Robinson, vice president, in charge of industrial production development program, to provide facilities for large scale production of these products. Polymers and resin emulsions are finding widespread use as paper coating binders.

**CARPENTER STEEL CO.**, Union, N. J., has a new bulletin on its specialty super-corrosion resistant tubing and pipe in alloys known as "B" and "C"; the former being a nickel-molybdenum alloy with excellent resistance to hydrochloric acid and the latter a nickel-molybdenum-chromium alloy highly resistant to strong oxidizing conditions. Write the Carpenter Steel Co., Alloy Tube Div., Union, N. J.



### Away With Fuzz

This is Lodding's Fuzz Remover recently introduced by Lodding Engineering Corp., Worcester, Mass., which, based on installations to several machines, is said to have resulted in outstanding benefit to operators, such as a better sheet, free from scabs and lint, greater drying efficiency from cleaner dryers and removal of fire hazard caused by airborne floating fuzz.

**FRANK G. HOUGH CO.**, Libertyville, Ill., has announced its third new 4-wheel drive "Payload" model, HO, with a capacity of two cubic yds. Full details may be had from the company at 891-7th St., Libertyville, Ill.

**B. F. PERKINS & SON, INC.**, Holyoke, Mass., has a new Supercalender, which it is claimed makes possible speeds and pressure beyond present-day practices, due to heavy fabricated steel plate sections on frames and base and reinforcement throughout.

*Indianapolis*  
*Invites you to the*  
**English**  
*Hotel*



SUPERB SERVICE  
• CENTRAL LOCATION  
• EXTRA CONVENIENCES

**INDIANAPOLIS  
INDIANA**

Other Ingram-Cunningham Hotels in  
Kalamazoo, Mich.—The **BURDICK HOTEL**  
Kalamazoo, Mich.—The **COLUMBIA HOTEL**  
Nashville, Tenn.—The **CLARKSTON HOTEL**





**Rose and Bailey**  
**Executive Vice Presidents**

**ELMER J. ROSE** (left) and **MILTON R. BAILEY** (right) are new Exec. Vice Presidents of Bulkley Dunton Pulp Co., it is announced by Fred Enders, President.

Mr. Rose joined Bulkley Dunton's New York headquarter's office in 1937 and was made a Vice Pres. in 1945. He has spent his entire career in the pulp and paper field, starting with Union Bag in 1919 after leaving the U.S. Army Air Service in which he was a pilot.

Mr. Bailey joined B-D in 1939 and was placed in charge of their Kalamazoo office, where he continues to direct the firm's Midwest operations. He was elected a Vice Pres. in 1945. A U. of Illinois graduate, Mr. Bailey has done graduate work at American Institute of Banking, and was former Vice President of American National Bank of Kalamazoo.

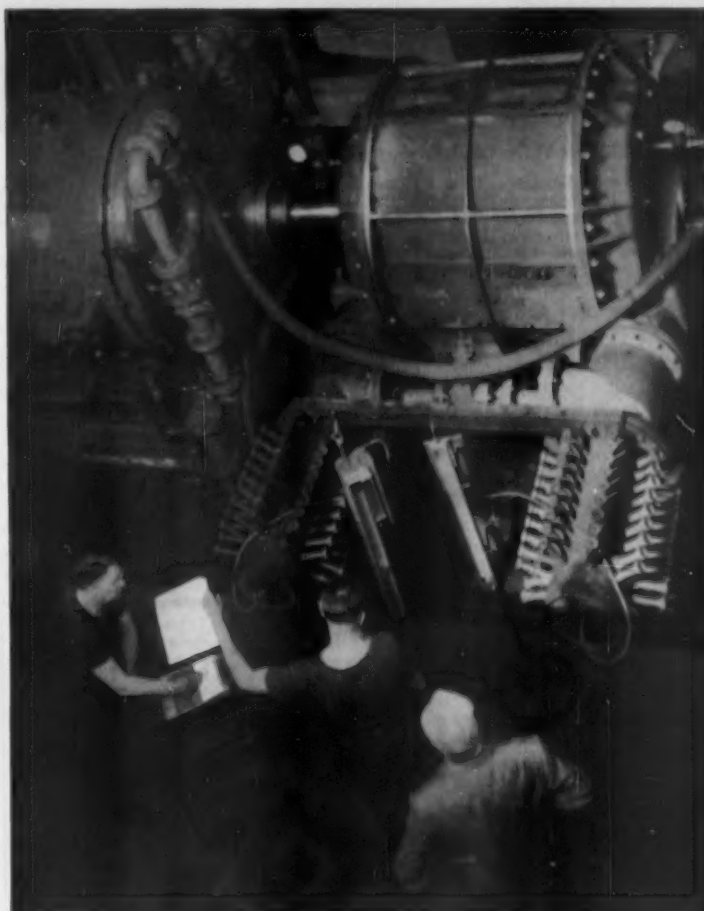
**SARAN PROTECTIVE COATINGS CO.**, Ferndale (Detroit) 20, Michigan, has announced a new chemical and corrosion resistant coating formulated from DuPont Neoprene and certain hardening resins which can be applied directly as received by conventional methods of brush, roller, spray or dip. It requires no accelerator and no primer and has excellent adhesion to all clean dry surfaces, rigid or flexible. It dries dust free in 30 mins. and can be put in service overnight.

**CAMCO PRODUCTS, INC.**, North Haven, Conn., has a new line of heavy duty stainless pipe fittings, 2000#, 3000#, 4000# and 6000#, screwed and socket-weld.

**SIGNODE STEEL STRAPPING CO.**, 2600 N. Western Ave., Chicago 47, Ill., has a new packing and carloading guide containing 44 pages of usable facts on lowering freight bills and pilferage, reducing loss and damage claims, reducing container costs and speeding packing and shipping. Copies are free.

**ALLIS-CHALMERS MFG. CO.**, 955 S. 70th St., Milwaukee, Wis., has a new "Vari-Pitch" speed changer bulletin, 20B6013D, entitled "Texrope Drive Speed Changers" which lists operating advantages.

## **Rated performance of every Nash Vacuum Pump is assured by this precise laboratory test**



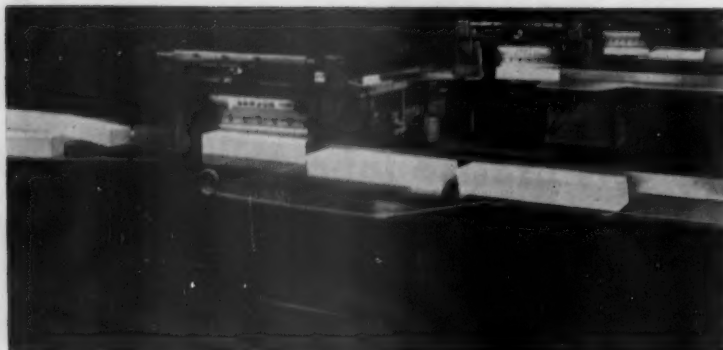
Rated capacities of Nash Vacuum Pumps are not theoretical. Every Nash Pump is tested individually. Air capacity is determined by delivery thru accurately machined and calibrated orifices. Related vacuum is measured by precise mercury column, and horse power is recorded electro-dynamically. Records of these tests are retained by us, and certified copies are available to Nash Pump owners.

That is one of the reasons why Nash Vacuum Pumps are installed in over a thousand leading Paper Mills. An engineer from Nash will be glad to survey your mill, and make recommendations, entirely without obligation to you.

## **NASH ENGINEERING COMPANY**

**440 WILSON ROAD, SO. NORWALK, CONN.**





#### Scott Mill Adds Third Lawson Cutter

A third Lawson Electronic Spacer Cutter has been installed in the Winslow, Maine, mill of the Hollingsworth & Whitney Division of Scott Paper Co. Scott has launched a program of expansion in this division in Maine. The hydraulic clamping feature of the Lawson Cutters gives this mill the accuracy required in the cutting of their various types of papers. The increased production made possible by an electronic spacing device will enable them to produce profitably in any future market.

#### New Acumeter Offers Savings Handling Additives

Cooperation between Acumeter Laboratories, Inc. and Nopco Chemical Co. has resulted in development of a compact apparatus for continuously metering, emulsifying, and feeding additives into the papermaking process. It can handle additives having a wide range of viscosities.

No longer is it necessary to dissolve or emulsify additives batchwise to in-

sure even feeding into the process. Liquids, thin- or heavy-bodied pastes, and low melting solids can be processed with equal ease through the Acumeter system. Suggested applications include defoamer preparation, wax size preparation from anhydrous wax-emulsifier mixture, wet strength or other resin handling, injecting penetrating agent into continuous process cooking liquor, blending and metering softening and rewetting agents for

tissue or toweling, pigment-retention polymer dilution and addition.

The system includes a stainless steel metering pump connected to a gear box. The gears provide 20 rates of feed over a 6-to-1 range. Various capacity pumps are available. The smallest 1-BUP-2 pump feeds from 0.25 to 1.502 cc. per revolution. This corresponds to 0.9 to 5.3 p.p.h., with a 29 r.p.m. drive. The largest 22-BUP-2 pump feeds from 16 to 96 p.p.h.

Metered additive from pumps passes through an emulsification chamber where it is continuously and uniformly dispersed before being added to the process.

The unit is compact, mounted on a base plate 18 in. square, is easily made portable, convenient.



**GEORGE A. LEAR**, Moore & White Pres., now in Europe to establish sales and distribution outlets.

#### Moore & White President Seeks Markets in Free Europe

**THE MOORE & WHITE CO.**, Philadelphia manufacturer of custom-built machines for paper and paperboard mills, is establishing sales and distribution outlets in Europe, searching for European-made products needed by the industry in United States, and exploring what products can be manufactured economically in Europe to supplement the company's present line of equipment.

George A. Lear, president of the firm, sailed June 29 for a 14-months business trip in all countries west of the Iron Curtain. He plans to visit every pulp and paper mill in Free Europe. He will headquarter in Amsterdam with his family.

Moore & White, leading manufacturer of custom-built machines for paper and board mills since 1885, recently contracted with H. W. Butterworth & Sons Co., Bethayres, Pa., to manufacture its products. These include rotary sheet cutters, automatic layboys, backstands, slitter assemblies and blades, paper machine sections and drives, sampling devices, friction clutches, guides, and rolls.

Moore & White has expanded its sales and engineering staff, and moved into a new building at 330 East Hunting Park Ave., Philadelphia.

**THE JEFFREY MFG. CO.**, Columbus 16, O., offers its booklet No. 888 for a quick concise picture of the company and its products.

## Greater Production of Higher Quality Pulp

- in Less Time
- at Lower Cost

This is the end result of the various processes and equipment which we have installed in pulp mills throughout North America. Send us details of your requirements.

**Chemipulp Process Inc.**  
Woolworth Bldg. Watertown, N. Y.

Associated with  
**Chemipulp Process Ltd., 403 Crescent Bldg., Montreal**

**West Coast**  
A. H. Lundberg  
Orpheum Bldg., Seattle

**Lundberg-Ahien Equipment Ltd.**  
146 E. Broadway, Vancouver



### WANTED DESIGN ENGINEER

For Southern board mill. Capable of general steam engineering and heat transfer. Must also be willing to do board work in general mechanical lines. Give complete information regarding education, experience, references, personal data and salary desired. Box 236, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### WANTED

ENGINEER - DRAFTSMAN. Excellent opportunity for right man with experience in pulp, paper and wallboard industries. Location, New York City. All replies confidential. Box 235, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### POSITIONS OPEN

We can place—Managers, supts. and asst. supts. for mills making condenser, tissue, photographic and other fine papers, also for board mills; sulphite supt.; pulp supt.

Chemical engineers, chemists and laboratory men for mills, also for demonstrating and selling; coating supervisor; super-calender operator; time study-industrial engineers.

Mechanical and electrical engineers, designers and draftsmen; master mechanics and plant engineers; finishing foreman; Yankee machine tender (So. Amer.); beater engineers; newsprint machine tender, wide fast running machine; Cylinder and Fourdrinier machine foreman; Cylinder machine tender; salesmen (2) to sell paper makers felt.

If you are available for a good paying position in paper or pulp manufacturing or paper converting, it will pay you to have your application in our files. Negotiations are confidential. No fee to be paid unless you accept employment through us.

### CHARLES P. RAYMOND SERVICE, Inc.

Phone: Liberty 2-6547  
294 Washington St. Boston 8, Mass.

### POSITION WANTED

MULTI-WALL-sewing department foreman—10 years experience, desires supervisors position. Multi-wall only. Address Box 230, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

## FOR SALE

Complete pulp mill. 150 tons kraft pulp with approx. 35,000 acres timber land. Also 116" trim, 110 ton, five cylinder board machine.

Mill is located in northern Michigan, is complete, and immediate possession can be had.

For information contact THE BLACK-CLAWSON COMPANY, SHARTLE BROS. MACHINE DIVISION, MIDDLETOWN, OHIO, ATTENTION: USED EQUIPMENT DEPARTMENT.

### WANTED

Paper Mill Superintendent experienced in the complete operation, including maintenance, of Mill producing liner and folding carton board. Two cylinder machines producing approximately 200 tons per day. Should have both technical and practical background and experience. Integrated board, carton and carton container manufacturer located in Midwest. Address replies to Box 233, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### WANTED

Plant Industrial Engineer for a Pulp and Paper Mill located in the Midwest. Should be familiar with Mill operation, methods work, cost studies, and job evaluation. Kindly address resume of education and experience to Box 232, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### FOR SALE

- 6-84" Red-Ray burners with manifolds and silicon carbide side and end plates
- 6- Main burner mixers
- 1- Air filter
- 1- Motor and blower
- 1- Zero Regulator
- 1- Safety Shut-off valve
- 1- Electronic Combustion Safeguard in dust tight enclosure
- 1- Photo-switch
- 1- Centrifugal speed switch
- 1- Power Step-down transformer
- Miscellaneous fittings

Reply Box 229, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### WANTED

Young man experienced in Latin American paper export business. Must be capable Spanish correspondent. Good opportunity for advancement. Send complete details your background to Box 234, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### WANTED

Capable young man to assist manager of American paper distributor in Far East. No foreign language necessary. Must be unmarried, and have had some experience in paper trade. Send photograph and full details of experience and personal history to P.O. Box 725, Old Greenwich, Connecticut, U.S.A.

### WANTED

General Superintendent for bleached kraft Pulp and Paper Mill being built in midwest. This man is wanted to participate in the actual building and subsequent operation of the Mill. Technical as well as practical experience highly desirable. Kindly address resume of education and experience to Box 231, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.

### Attention Superintendents

Your experience and "know how" can be very lucrative. You can be in business for yourself and still keep your present position. For details which will be held confidential write Box 222, PULP & PAPER, 370 Lexington Ave., New York 17, N. Y.



*Manufacturers of:*

## STAINLESS STEEL PIPE & FITTINGS

*... for the Pulp & Paper Industry*

**ALASKAN COPPER**

3600 E. MARGINAL WAY • SEATTLE  
EL. 5800 • TWX 58-392



## DeZURIK VEE-PORT VALVES

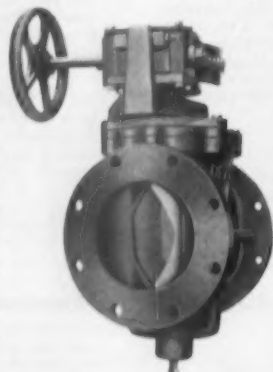
### FOR PRECISE THROTTLING AND UNIFORM STOCK FLOW



**YOU CAN SET A DeZURIK VEE-PORT VALVE at any point desired . . . from wide open to minimum flow . . . yet the diamond shaped orifice retains exactly the same shape . . . the flow rate is constant at each setting!**

It's the ideal valve for throttling service on pulp and paper stock lines. The rate of discharge remains constant at any setting—there is no buildup of stock in the orifice . . . no "eddy point" where stock can pack. This stable operation results in extremely accurate control.

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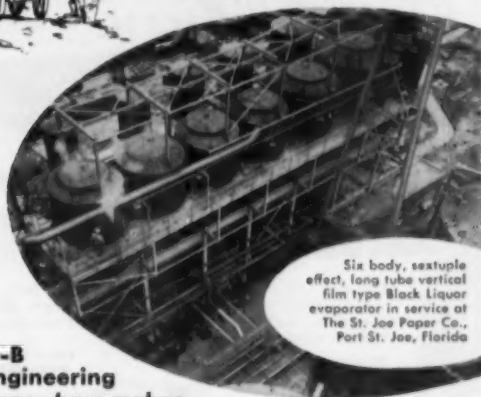
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